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## **RNA INTERFERENCE MEDIATED INHIBITION OF GENE EXPRESSION USING SHORT INTERFERING NUCLEIC ACID (siNA)**

This invention claims the benefit of Beigelman USSN 60/358,580 filed February 20, 2002, of Beigelman USSN 60/363,124 filed March 11, 2002, of Beigelman USSN 60/386,782 filed June 6, 2002, of Beigelman USSN 60/406,784 filed August 29, 2002, of Beigelman USSN 60/408,378 filed September 5, 2002, of Beigelman USSN 60/409,293 filed September 9, 2002, and of Beigelman USSN 60/440,129 filed January 15, 2003. These applications are hereby incorporated by reference herein in their entireties, including the drawings.

### Field Of The Invention

The present invention concerns methods and reagents useful in modulating gene expression in a variety of applications, including use in therapeutic, diagnostic, target validation, and genomic discovery applications. Specifically, the invention relates to small nucleic acid molecules, such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) molecules capable of mediating RNA interference (RNAi).

### Background Of The Invention

The following is a discussion of relevant art pertaining to RNAi. The discussion is provided only for understanding of the invention that follows. The summary is not an admission that any of the work described below is prior art to the claimed invention. Applicant demonstrates herein that chemically modified short interfering nucleic acids possess the same capacity to mediate RNAi as do siRNA molecules and are expected to possess improved stability and activity in vivo; therefore, this discussion is not meant to be limiting only to siRNA and can be applied to siNA as a whole.

RNA interference refers to the process of sequence-specific post-transcriptional gene silencing in animals mediated by short interfering RNAs (siRNAs) (Fire *et al.*, 1998, *Nature*, 391, 806). The corresponding process in plants is commonly referred to as post-transcriptional gene silencing or RNA silencing and is also referred to as quelling in fungi. The process of post-transcriptional gene silencing is thought to be an



evolutionarily-conserved cellular defense mechanism used to prevent the expression of foreign genes and is commonly shared by diverse flora and phyla (Fire *et al.*, 1999, *Trends Genet.*, 15, 358). Such protection from foreign gene expression may have evolved in response to the production of double-stranded RNAs (dsRNAs) derived from viral infection or from the random integration of transposon elements into a host genome via a cellular response that specifically destroys homologous single-stranded RNA or viral genomic RNA. The presence of dsRNA in cells triggers the RNAi response though a mechanism that has yet to be fully characterized. This mechanism appears to be different from the interferon response that results from dsRNA-mediated activation of protein kinase PKR and 2',5'-oligoadenylate synthetase resulting in non-specific cleavage of mRNA by ribonuclease L.

The presence of long dsRNAs in cells stimulates the activity of a ribonuclease III enzyme referred to as dicer. Dicer is involved in the processing of the dsRNA into short pieces of dsRNA known as short interfering RNAs (siRNAs) (Berstein *et al.*, 2001, *Nature*, 409, 363). Short interfering RNAs derived from dicer activity are typically about 21 to about 23 nucleotides in length and comprise about 19 base pair duplexes (Elbashir *et al.*, 2001, *Genes Dev.*, 15, 188). Dicer has also been implicated in the excision of 21- and 22-nucleotide small temporal RNAs (stRNAs) from precursor RNA of conserved structure that are implicated in translational control (Hutvagner *et al.*, 2001, *Science*, 293, 834). The RNAi response also features an endonuclease complex, commonly referred to as an RNA-induced silencing complex (RISC), which mediates cleavage of single-stranded RNA having sequence complementary to the antisense strand of the siRNA duplex. Cleavage of the target RNA takes place in the middle of the region complementary to the antisense strand of the siRNA duplex (Elbashir *et al.*, 2001, *Genes Dev.*, 15, 188).

RNAi has been studied in a variety of systems. Fire *et al.*, 1998, *Nature*, 391, 806, were the first to observe RNAi in *C. elegans*. Wianny and Goetz, 1999, *Nature Cell Biol.*, 2, 70, describe RNAi mediated by dsRNA in mouse embryos. Hammond *et al.*, 2000, *Nature*, 404, 293, describe RNAi in *Drosophila* cells transfected with dsRNA. Elbashir *et al.*, 2001, *Nature*, 411, 494, describe RNAi induced by introduction of duplexes of synthetic 21-nucleotide RNAs in cultured mammalian cells including human embryonic kidney and HeLa cells. Recent work in *Drosophila* embryonic lysates

(Elbashir *et al.*, 2001, *EMBO J.*, 20, 6877) has revealed certain requirements for siRNA length, structure, chemical composition, and sequence that are essential to mediate efficient RNAi activity. These studies have shown that 21-nucleotide siRNA duplexes are most active when containing 3'-terminal dinucleotide overhangs. Furthermore, complete substitution of one or both siRNA strands with 2'-deoxy (2'-H) or 2'-O-methyl nucleotides abolishes RNAi activity, whereas substitution of the 3'-terminal siRNA overhang nucleotides with 2'-deoxy nucleotides (2'-H) was shown to be tolerated. Single mismatch sequences in the center of the siRNA duplex were also shown to abolish RNAi activity. In addition, these studies also indicate that the position of the cleavage site in the target RNA is defined by the 5'-end of the siRNA guide sequence rather than the 3'-end of the guide sequence (Elbashir *et al.*, 2001, *EMBO J.*, 20, 6877). Other studies have indicated that a 5'-phosphate on the target-complementary strand of a siRNA duplex is required for siRNA activity and that ATP is utilized to maintain the 5'-phosphate moiety on the siRNA (Nykanen *et al.*, 2001, *Cell*, 107, 309).

Studies have shown that replacing the 3'-terminal nucleotide overhanging segments of a 21-mer siRNA duplex having two -nucleotide 3'-overhangs with deoxyribonucleotides does not have an adverse effect on RNAi activity. Replacing up to four nucleotides on each end of the siRNA with deoxyribonucleotides has been reported to be well tolerated, whereas complete substitution with deoxyribonucleotides results in no RNAi activity (Elbashir *et al.*, 2001, *EMBO J.*, 20, 6877). In addition, Elbashir *et al.*, *supra*, also report that substitution of siRNA with 2'-O-methyl nucleotides completely abolishes RNAi activity. Li *et al.*, International PCT Publication No. WO 00/44914, and Beach *et al.*, International PCT Publication No. WO 01/68836 preliminarily suggest that siRNA may include modifications to either the phosphate-sugar backbone or the nucleoside to include at least one of a nitrogen or sulfur heteroatom, however, neither application postulates to what extent such modifications would be tolerated in siRNA molecules, nor provides any further guidance or examples of such modified siRNA. Kreutzer *et al.*, Canadian Patent Application No. 2,359,180, also describe certain chemical modifications for use in dsRNA constructs in order to counteract activation of double-stranded RNA-dependent protein kinase PKR, specifically 2'-amino or 2'-O-methyl nucleotides, and nucleotides containing a 2'-O or 4'-C methylene bridge.

However, Kreutzer *et al.* similarly fails to provide examples or guidance as to what extent these modifications would be tolerated in siRNA molecules.

Parrish *et al.*, 2000, *Molecular Cell*, 6, 1977-1087, tested certain chemical modifications targeting the unc-22 gene in *C. elegans* using long (>25 nt) siRNA transcripts. The authors describe the introduction of thiophosphate residues into these siRNA transcripts by incorporating thiophosphate nucleotide analogs with T7 and T3 RNA polymerase and observed that RNAs with two phosphorothioate modified bases also had substantial decreases in effectiveness as RNAi. Further, Parrish *et al.* reported that phosphorothioate modification of more than two residues greatly destabilized the RNAs *in vitro* such that interference activities could not be assayed. *Id.* at 1081. The authors also tested certain modifications at the 2'-position of the nucleotide sugar in the long siRNA transcripts and found that substituting deoxynucleotides for ribonucleotides produced a substantial decrease in interference activity, especially in the case of Uridine to Thymidine and/or Cytidine to deoxy-Cytidine substitutions. *Id.* In addition, the authors tested certain base modifications, including substituting, in sense and antisense strands of the siRNA, 4-thiouracil, 5-bromouracil, 5-iodouracil, and 3-(aminoallyl)uracil for uracil, and inosine for guanosine. Whereas 4-thiouracil and 5-bromouracil substitution appeared to be tolerated, Parrish reported that inosine produced a substantial decrease in interference activity when incorporated in either strand. Parrish also reported that incorporation of 5-iodouracil and 3-(aminoallyl)uracil in the antisense strand resulted in a substantial decrease in RNAi activity as well.

The use of longer dsRNA has been described. For example, Beach *et al.*, International PCT Publication No. WO 01/68836, describes specific methods for attenuating gene expression using endogenously-derived dsRNA. Tuschl *et al.*, International PCT Publication No. WO 01/75164, describe a *Drosophila in vitro* RNAi system and the use of specific siRNA molecules for certain functional genomic and certain therapeutic applications; although Tuschl, 2001, *Chem. Biochem.*, 2, 239-245, doubts that RNAi can be used to cure genetic diseases or viral infection due to the danger of activating interferon response. Li *et al.*, International PCT Publication No. WO 00/44914, describe the use of specific dsRNAs for attenuating the expression of certain target genes. Zernicka-Goetz *et al.*, International PCT Publication No. WO 01/36646, describe certain methods for inhibiting the expression of particular genes in mammalian

cells using certain dsRNA molecules. Fire *et al.*, International PCT Publication No. WO 99/32619, describe particular methods for introducing certain dsRNA molecules into cells for use in inhibiting gene expression. Plaetinck *et al.*, International PCT Publication No. WO 00/01846, describe certain methods for identifying specific genes responsible for

5 conferring a particular phenotype in a cell using specific dsRNA molecules. Mello *et al.*, International PCT Publication No. WO 01/29058, describe the identification of specific genes involved in dsRNA-mediated RNAi. Deschamps Depaillette *et al.*, International PCT Publication No. WO 99/07409, describe specific compositions consisting of particular dsRNA molecules combined with certain anti-viral agents. Waterhouse *et al.*,

10 International PCT Publication No. 99/53050, describe certain methods for decreasing the phenotypic expression of a nucleic acid in plant cells using certain dsRNAs. Driscoll *et al.*, International PCT Publication No. WO 01/49844, describe specific DNA constructs for use in facilitating gene silencing in targeted organisms.

Others have reported on various RNAi and gene-silencing systems. For example,

15 Parrish *et al.*, 2000, *Molecular Cell*, 6, 1977-1087, describe specific chemically-modified siRNA constructs targeting the unc-22 gene of *C. elegans*. Grossniklaus, International PCT Publication No. WO 01/38551, describes certain methods for regulating polycomb gene expression in plants using certain dsRNAs. Churikov *et al.*, International PCT Publication No. WO 01/42443, describe certain methods for modifying genetic

20 characteristics of an organism using certain dsRNAs. Cogoni *et al.*, International PCT Publication No. WO 01/53475, describe certain methods for isolating a *Neurospora* silencing gene and uses thereof. Reed *et al.*, International PCT Publication No. WO 01/68836, describe certain methods for gene silencing in plants. Honer *et al.*, International PCT Publication No. WO 01/70944, describe certain methods of drug

25 screening using transgenic nematodes as Parkinson's Disease models using certain dsRNAs. Deak *et al.*, International PCT Publication No. WO 01/72774, describe certain *Drosophila*-derived gene products that may be related to RNAi in *Drosophila*. Arndt *et al.*, International PCT Publication No. WO 01/92513 describe certain methods for mediating gene suppression by using factors that enhance RNAi. Tuschl *et al.*,

30 International PCT Publication No. WO 02/44321, describe certain synthetic siRNA constructs. Pachuk *et al.*, International PCT Publication No. WO 00/63364, and Satishchandran *et al.*, International PCT Publication No. WO 01/04313, describe certain

methods and compositions for inhibiting the function of certain polynucleotide sequences using certain dsRNAs. Echeverri *et al.*, International PCT Publication No. WO 02/38805, describe certain *C. elegans* genes identified via RNAi. Kreutzer *et al.*, International PCT Publications Nos. WO 02/055692, WO 02/055693, and EP 1144623 B1 describes certain  
5 methods for inhibiting gene expression using RNAi. Graham *et al.*, International PCT Publications Nos. WO 99/49029 and WO 01/70949, and AU 4037501 describe certain vector expressed siRNA molecules. Fire *et al.*, US 6,506,559, describe certain methods for inhibiting gene expression in vitro using certain long dsRNA (greater than 25 nucleotide) constructs that mediate RNAi.

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## SUMMARY OF THE INVENTION

This invention relates to compounds, compositions, and methods useful for modulating RNA function and/or gene expression in a cell. Specifically, the instant invention features synthetic small nucleic acid molecules, such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-  
15 RNA (miRNA), and short hairpin RNA (shRNA) molecules capable of modulating gene expression in cells by RNA inference (RNAi). The siRNA of the instant invention can be chemically synthesized, expressed from a vector or enzymatically synthesized. The use of chemically modified siNA can improve various properties of native siRNA molecules through increased resistance to nuclease degradation *in vivo* and/or improved cellular  
20 uptake. The chemically modified siNA molecules of the instant invention provide useful reagents and methods for a variety of therapeutic, diagnostic, agricultural, target validation, genomic discovery, genetic engineering and pharmacogenomic applications.

In a non-limiting example, the introduction of chemically modified nucleotides into nucleic acid molecules provides a powerful tool in overcoming potential limitations of *in*  
25 *vivo* stability and bioavailability inherent to native RNA molecules that are delivered exogenously. For example, the use of chemically modified nucleic acid molecules can enable a lower dose of a particular nucleic acid molecule for a given therapeutic effect since chemically modified nucleic acid molecules tend to have a longer half-life in serum. Furthermore, certain chemical modifications can improve the bioavailability of nucleic  
30 acid molecules by targeting particular cells or tissues and/or improving cellular uptake of the nucleic acid molecule. Therefore, even if the activity of a chemically modified

nucleic acid molecule is reduced as compared to a native nucleic acid molecule, for example when compared to an all RNA nucleic acid molecule, the overall activity of the modified nucleic acid molecule can be greater than the native molecule due to improved stability and/or delivery of the molecule. Unlike native unmodified siRNA, chemically  
5 modified siNA can also minimize the possibility of activating interferon activity in humans.

The siRNA molecules of the invention can be designed to inhibit gene expression through RNAi targeting of a variety of RNA molecules. In one embodiment, the siRNA molecules of the invention are used to target various RNAs corresponding to a target  
10 gene. Non-limiting examples of such RNAs include messenger RNA (mRNA), alternate RNA splice variants of target gene(s), post-transcriptionally modified RNA of target gene(s), pre-mRNA of target gene(s). If alternate splicing produces a family of transcripts that are distinguished by usage of appropriate exons, the instant invention can be used to inhibit gene expression through the appropriate exons to specifically inhibit or to  
15 distinguish among the functions of gene family members. For example, a protein that contains an alternatively spliced transmembrane domain can be expressed in both membrane bound and secreted forms. Use of the invention to target the exon containing the transmembrane domain can be used to determine the functional consequences of pharmaceutical targeting of membrane bound as opposed to the secreted form of the  
20 protein. Non-limiting examples of applications of the invention relating to targeting these RNA molecules include therapeutic pharmaceutical applications, pharmaceutical discovery applications, molecular diagnostic and gene function applications, and gene mapping, for example using single nucleotide polymorphism mapping with siRNA molecules of the invention. Such applications can be implemented using known gene  
25 sequences or from partial sequences available from an expressed sequence tag (EST).

In another embodiment, the siRNA molecules of the invention are used to target conserved sequences corresponding to a gene family or gene families. As such, siRNA can be used to characterize pathways of gene function in a variety of applications. For example, the present invention can be used to inhibit the activity of target gene(s) in a  
30 pathway to determine the function of uncharacterized gene(s) in gene function analysis, mRNA function analysis, or translational analysis. The invention can be used to determine potential target gene pathways involved in various diseases and conditions

toward pharmaceutical development. The invention can be used to understand pathways of gene expression involved in development, such as prenatal development, postnatal development and/or aging.

In one embodiment, the invention features a short interfering nucleic acid (siNA) molecule that down-regulates expression of a gene family by RNA interference. The gene family can comprise more than one splice variant of a target gene, more than one post-transcriptionally modified RNA of a target gene, or more than one RNA transcript having shared homology. In one embodiment, the gene family comprises epidermal growth factor (e.g., EGFR, such as HER1, HER2, HER3, and/or HER4) genes, vascular endothelial growth factor and vascular endothelial growth factor receptor (e.g., VEGF, VEGFR1, VEGFR2, or VEGFR3) genes, or viral genes corresponding to different viral strains (e.g., HIV-1 and HIV-2). Such gene families can be established by analysing nucleic acid sequences (e.g., sequences shown by Genbank Accession Nos. in **Table V**) for homology.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule comprises one or more chemical modifications and each strand of the double-stranded siNA is about 21 nucleotides long.

In one embodiment, a siNA molecule of the invention comprises no ribonucleotides. In another embodiment, a siNA molecule of the invention comprises ribonucleotides.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein one of the strands of the double-stranded siNA molecule comprises a nucleotide sequence that is complementary to a nucleotide sequence of the endogenous mammalian target gene or a portion thereof, and wherein the second strand of the double-stranded siNA molecule comprises a nucleotide sequence substantially similar to the nucleotide sequence of the endogenous mammalian target gene or a portion thereof.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein each strand of the siNA molecule comprises about 19 to about 23 nucleotides, and wherein each strand comprises about 19  
5 nucleotides that are complementary to the nucleotides of the other strand.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule comprises an antisense region comprising a nucleotide sequence that is complementary to a nucleotide  
10 sequence of the endogenous mammalian target gene or a portion thereof, and wherein the siNA further comprises a sense region, wherein the sense region comprises a nucleotide sequence substantially similar to the nucleotide sequence of the endogenous mammalian target gene or a portion thereof.

In one embodiment, the invention features a double-stranded short interfering  
15 nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the antisense region and the sense region each comprise about 19 to about 23 nucleotides, and wherein the antisense region comprises about 19 nucleotides that are complementary to nucleotides of the sense region.

20 In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule comprises a sense region and an antisense region and wherein the antisense region comprises a nucleotide sequence that is complementary to a nucleotide sequence of RNA encoded by  
25 the endogenous mammalian target gene or a portion thereof and the sense region comprises a nucleotide sequence that is complementary to the antisense region.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule is assembled  
30 from two separate oligonucleotide fragments wherein one fragment comprises the sense region and the second fragment comprises the antisense region of the siNA molecule.



The sense region can be connected to the antisense region via a linker molecule, such as a polynucleotide linker or a non-nucleotide linker.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule comprises a sense region and an antisense region and wherein the antisense region comprises a nucleotide sequence that is complementary to a nucleotide sequence of RNA encoded by the endogenous mammalian target gene or a portion thereof and the sense region comprises a nucleotide sequence that is complementary to the antisense region, and wherein pyrimidine nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides, 2'-deoxy nucleotides, and/or 2'-deoxy-2'-fluoro pyrimidine nucleotides.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule is assembled from two separate oligonucleotide fragments wherein one fragment comprises the sense region and the second fragment comprises the antisense region of the siNA molecule, and wherein the fragment comprising the sense region includes a terminal cap moiety at the 5'-end, the 3'-end, or both of the 5' and 3' ends of the fragment comprising the sense region. In another embodiment, the terminal cap moiety is an inverted deoxy abasic moiety or glyceryl moiety. In another embodiment, each of the two fragments of the siNA molecule comprise 21 nucleotides.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule comprises a sense region and an antisense region and wherein the antisense region comprises a nucleotide sequence that is complementary to a nucleotide sequence of RNA encoded by the endogenous mammalian target gene or a portion thereof and the sense region comprises a nucleotide sequence that is complementary to the antisense region, and wherein the purine nucleotides present in the antisense region comprise 2'-deoxy- purine nucleotides. In another embodiment, the antisense region comprises a phosphorothioate

internucleotide linkage at the 3' end of the antisense region. In another embodiment, the antisense region comprises a glyceryl modification at the 3' end of the antisense region.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene (e.g., a human gene), wherein the siNA molecule is assembled  
5 from two separate oligonucleotide fragments wherein one fragment comprises the sense region and the second fragment comprises the antisense region of the siNA molecule, and wherein about 19 nucleotides of each fragment of the siNA molecule are base-paired to the complementary nucleotides of the other fragment of the siNA molecule and wherein  
10 at least two 3' terminal nucleotides of each fragment of the siNA molecule are not base-paired to the nucleotides of the other fragment of the siNA molecule. In another embodiment, each of the two 3' terminal nucleotides of each fragment of the siNA molecule are 2'-deoxy-pyrimidines, such as 2'-deoxy-thymidine. In another embodiment, all 21 nucleotides of each fragment of the siNA molecule are base-paired to the  
15 complementary nucleotides of the other fragment of the siNA molecule. In another embodiment, about 19 nucleotides of the antisense region are base-paired to the nucleotide sequence or a portion thereof of the RNA encoded by the endogenous mammalian target gene. In another embodiment, 21 nucleotides of the antisense region are base-paired to the nucleotide sequence or a portion thereof of the RNA encoded by  
20 the endogenous mammalian target gene. In another embodiment, the 5'-end of the fragment comprising said antisense region optionally includes a phosphate group.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that inhibits the expression of an endogenous mammalian target RNA sequence (e.g., wherein said target RNA sequence is encoded by a human  
25 gene), wherein the siNA molecule comprises no ribonucleotides and wherein each strand of the double-stranded siNA molecule comprises about 21 nucleotides.

In one embodiment, the invention features a double-stranded short interfering nucleic acid (siNA) molecule that inhibits the expression of an endogenous mammalian target gene (e.g., a human gene such as vascular endothelial growth factor, vascular  
30 endothelial growth factor receptor (such as VEGFR1, VEGFR2, or VEGFR3), BCL2, HER2/neu, c-Myc, PCNA, REL-A, PTP1B, BACE, CHK1, PKC-alpha, or EGFR),

wherein the siNA molecule does not require the presence of a ribonucleotide within the siNA molecule for said inhibition of expression of an endogenous mammalian target gene and wherein each strand of the double-stranded siNA molecule is about 21 nucleotides long.

- 5           In one embodiment, the invention features a medicament comprising a siNA molecule of the invention.

          In one embodiment, the invention features an active ingredient comprising a siNA molecule of the invention.

- 10           In one embodiment, the invention features the use of a double-stranded short interfering nucleic acid (siNA) molecule to down-regulate expression of an endogenous mammalian target gene, wherein the siNA molecule comprises one or more chemical modifications and each strand of the double-stranded siNA is about 21 nucleotides long.

- 15           In one embodiment, siRNA molecule(s) and/or methods of the invention are used to inhibit the expression of gene(s) that encode RNA referred to by Genbank Accession number in **Table V**. In another embodiment, siRNA molecule(s) and/or methods of the invention are used to target RNA sequence(s) referred to by Genbank Accession number in **Table V**, or nucleic acid sequences encoding such sequences referred to by Genbank Accession number in **Table V**. Such sequences are readily obtained using the Genbank Accession numbers in **Table V**.

- 20           In one embodiment, the invention features a siNA molecule having RNAi activity against an RNA encoding a protein, wherein the siNA molecule comprises a sequence complementary to RNA having protein encoding sequence, such as those sequences having GenBank Accession Nos. shown in **Table V**.

- 25           In another embodiment, the invention features a siNA molecule having RNAi activity against a gene, wherein the siNA molecule comprises nucleotide sequence complementary to a nucleotide sequence of the gene, such as genes encoding sequences having GenBank Accession Nos. shown in **Table V**. In another embodiment, a siNA molecule of the invention includes nucleotide sequence that can interact with nucleotide sequence of a gene and thereby mediate silencing of gene expression, for example,

wherein the siNA mediates regulation of gene expression by cellular processes that modulate the chromatin structure of the gene and prevent transcription of the gene.

In yet another embodiment, the invention features a siNA molecule comprising a sequence, for example, the antisense sequence of the siNA construct, complementary to a  
5 sequence represented by GenBank Accession Nos. shown in **Table V** or a portion of said sequence.

In one embodiment, the nucleic acid molecules of the invention that act as mediators of the RNA interference gene silencing response are chemically modified double stranded nucleic acid molecules. As in their native double stranded RNA  
10 counterparts, these siNA molecules typically consist of duplexes containing about 19 base pairs between oligonucleotides comprising about 19 to about 25 nucleotides. The most active siRNA molecules are thought to have such duplexes with overhanging ends of 1-3 nucleotides, for example 21 nucleotide duplexes with 19 base pairs and 2 nucleotide 3'-overhangs. These overhanging segments are readily hydrolyzed by endonucleases *in vivo*.  
15 Studies have shown that replacing the 3'-overhanging segments of a 21-mer siRNA duplex having 2 nucleotide 3' overhangs with deoxyribonucleotides does not have an adverse effect on RNAi activity. Replacing up to 4 nucleotides on each end of the siRNA with deoxyribonucleotides has been reported to be well tolerated whereas complete substitution with deoxyribonucleotides results in no RNAi activity (Elbashir *et al.*, 2001,  
20 EMBO J., 20, 6877). In addition, Elbashir *et al. supra*, also report that substitution of siRNA with 2'-O-methyl nucleotides completely abolishes RNAi activity. Li *et al.*, International PCT Publication No. WO 00/44914, and Beach *et al.*, International PCT Publication No. WO 01/68836 both suggest that siRNA may include modifications to either the phosphate-sugar back bone or the nucleoside to include at least one of a  
25 nitrogen or sulfur heteroatom, however neither application teaches to what extent these modifications are tolerated in siRNA molecules nor provide any examples of such modified siRNA. Kreutzer and Limmer, Canadian Patent Application No. 2,359,180, also describe certain chemical modifications for use in dsRNA constructs in order to counteract activation of double stranded-RNA-dependent protein kinase PKR,  
30 specifically 2'-amino or 2'-O-methyl nucleotides, and nucleotides containing a 2'-O or 4'-C methylene bridge. However, Kreutzer and Limmer similarly fail to show to what

extent these modifications are tolerated in siRNA molecules nor provide any examples of such modified siRNA.

In one embodiment, the invention features chemically modified siNA constructs having specificity for target nucleic acid molecules in a cell (i.e. target nucleic acid molecules comprising or encoded by sequences referred to herein by Genbank Accession numbers in Table V). Non-limiting examples of such chemical modifications include without limitation phosphorothioate internucleotide linkages, 2'-O-methyl ribonucleotides, 2'-deoxy-2'-fluoro ribonucleotides, 2'-deoxy ribonucleotides, "universal base" nucleotides, 5-C-methyl nucleotides, and inverted deoxybasic residue incorporation. These chemical modifications, when used in various siNA constructs, are shown to preserve RNAi activity in cells while at the same time, dramatically increasing the serum stability of these compounds. Furthermore, contrary to the data published by Parrish *et al.*, *supra*, applicant demonstrates that multiple (greater than one) phosphorothioate substitutions are well-tolerated and confer substantial increases in serum stability for modified siNA constructs.

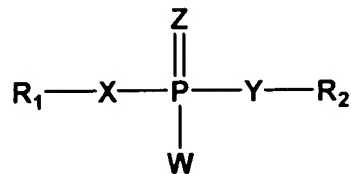
In one embodiment, a siNA molecule of the invention comprises modified nucleotides while maintaining the ability to mediate RNAi. The modified nucleotides can be used to improve *in vitro* or *in vivo* characteristics such as stability, activity, and/or bioavailability. For example, a siNA molecule of the invention can comprise modified nucleotides as a percentage of the total number of nucleotides present in the siNA molecule. As such, a siNA molecule of the invention can generally comprise modified nucleotides of about 5 to about 100% of the nucleotide positions (e.g., 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95% or 100% of the nucleotide positions). The actual percentage of modified nucleotides present in a given siNA molecule depends on the total number of nucleotides present in the siNA. If the siNA molecule is single stranded, the percent modification can be based upon the total number of nucleotides present in the single stranded siNA molecules. Likewise, if the siNA molecule is double stranded, the percent modification can be based upon the total number of nucleotides present in the sense strand, antisense strand, or both the sense and antisense strands. In addition, the actual percentage of modified nucleotides present in a given siNA molecule can also depend on the total number of purine and pyrimidine nucleotides present in the siNA, for example wherein all

pyrimidine nucleotides and/or all purine nucleotides present in the siNA molecule are modified.

The antisense region of a siNA molecule of the invention can comprise a phosphorothioate internucleotide linkage at the 3'-end of said antisense region. The antisense region can comprise about one to about five phosphorothioate internucleotide linkages at the 5'-end of said antisense region. The 3'-terminal nucleotide overhangs of a siNA molecule of the invention can comprise ribonucleotides or deoxyribonucleotides that are chemically-modified at a nucleic acid sugar, base, or backbone. The 3'-terminal nucleotide overhangs can comprise one or more universal base ribonucleotides. The 3'-terminal nucleotide overhangs can comprise one or more acyclic nucleotides.

One embodiment of the invention provides an expression vector comprising a nucleic acid sequence encoding at least one siNA molecule of the invention in a manner that allows expression of the nucleic acid molecule. Another embodiment of the invention provides a mammalian cell comprising such an expression vector. The mammalian cell can be a human cell. The siNA molecule of the expression vector can comprise a sense region and an antisense region. The antisense region can comprise sequence complementary to a RNA or DNA sequence encoding a protein and the sense region can comprise sequence complementary to the antisense region. The siNA molecule can comprise two distinct strands having complementary sense and antisense regions. The siNA molecule can comprise a single strand having complementary sense and antisense regions.

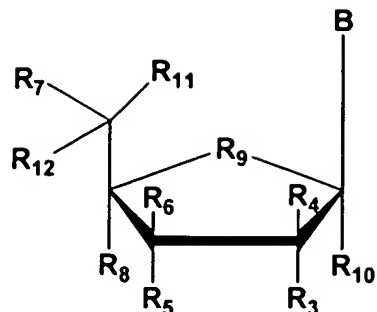
In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) nucleotides comprising a backbone modified internucleotide linkage having Formula I:



wherein each R1 and R2 is independently any nucleotide, non-nucleotide, or polynucleotide which can be naturally-occurring or chemically-modified, each X and Y is independently O, S, N, alkyl, or substituted alkyl, each Z and W is independently O, S, N, alkyl, substituted alkyl, O-alkyl, S-alkyl, alkaryl, or aralkyl, and wherein W, X, Y, and Z are optionally not all O.

The chemically-modified internucleotide linkages having Formula I, for example, wherein any Z, W, X, and/or Y independently comprises a sulphur atom, can be present in one or both oligonucleotide strands of the siNA duplex, for example, in the sense strand, the antisense strand, or both strands. The siNA molecules of the invention can comprise one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) chemically-modified internucleotide linkages having Formula I at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense strand, the antisense strand, or both strands. For example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (*e.g.*, about 1, 2, 3, 4, 5, or more) chemically-modified internucleotide linkages having Formula I at the 5'-end of the sense strand, the antisense strand, or both strands. In another non-limiting example, an exemplary siNA molecule of the invention can comprise one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) pyrimidine nucleotides with chemically-modified internucleotide linkages having Formula I in the sense strand, the antisense strand, or both strands. In yet another non-limiting example, an exemplary siNA molecule of the invention can comprise one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) purine nucleotides with chemically-modified internucleotide linkages having Formula I in the sense strand, the antisense strand, or both strands. In another embodiment, a siNA molecule of the invention having internucleotide linkage(s) of Formula I also comprises a chemically-modified nucleotide or non-nucleotide having any of Formulae I-VII.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) nucleotides or non-nucleotides having Formula II:

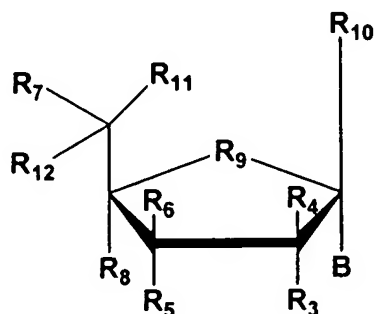


wherein each R3, R4, R5, R6, R7, R8, R10, R11 and R12 is independently H, OH, alkyl, substituted alkyl, alkaryl or aralkyl, F, Cl, Br, CN, CF3, OCF3, OCN, O-alkyl, S-alkyl, N-alkyl, O-alkenyl, S-alkenyl, N-alkenyl, SO-alkyl, alkyl-OSH, alkyl-OH, O-alkyl-OH, O-alkyl-SH, S-alkyl-OH, S-alkyl-SH, alkyl-S-alkyl, alkyl-O-alkyl, ONO2, NO2, N3, NH2, aminoalkyl, aminoacid, aminoacyl, ONH2, O-aminoalkyl, O-aminoacid, O-aminoacyl, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino, substituted silyl, or group having Formula I; R9 is O, S, CH2, S=O, CHF, or CF2, and B is a nucleosidic base such as adenine, guanine, uracil, cytosine, thymine, 2-aminoadenosine, 5-methylcytosine, 2,6-diaminopurine, or any other non-naturally occurring base that can be complementary or non-complementary to target RNA or a non-nucleosidic base such as phenyl, naphthyl, 3-nitropyrrole, 5-nitroindole, nebularine, pyridone, pyridinone, or any other non-naturally occurring universal base that can be complementary or non-complementary to target RNA.

The chemically-modified nucleotide or non-nucleotide of Formula II can be present in one or both oligonucleotide strands of the siNA duplex, for example in the sense strand, the antisense strand, or both strands. The siNA molecules of the invention can comprise one or more chemically-modified nucleotide or non-nucleotide of Formula II at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense strand, the antisense strand, or both strands. For example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (*e.g.*, about 1, 2, 3, 4, 5, or more) chemically-modified nucleotides or non-nucleotides of Formula II at the 5'-end of the sense strand, the antisense strand, or both strands. In another non-limiting example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (*e.g.*, about 1, 2, 3, 4, 5, or more) chemically-modified nucleotides or non-nucleotides of Formula II at the 3'-end of the sense strand, the antisense strand, or both strands.



In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) nucleotides or non-nucleotides having Formula III:



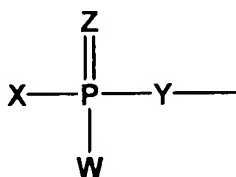
wherein each R3, R4, R5, R6, R7, R8, R10, R11 and R12 is independently H, OH, alkyl, substituted alkyl, alkaryl or aralkyl, F, Cl, Br, CN, CF3, OCF3, OCN, O-alkyl, S-alkyl, N-alkyl, O-alkenyl, S-alkenyl, N-alkenyl, SO-alkyl, alkyl-OSH, alkyl-OH, O-alkyl-OH, O-alkyl-SH, S-alkyl-OH, S-alkyl-SH, alkyl-S-alkyl, alkyl-O-alkyl, ONO2, NO2, N3, NH2, aminoalkyl, aminoacid, aminoacyl, ONH2, O-aminoalkyl, O-aminoacid, O-aminoacyl, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino, substituted silyl, or group having Formula I; R9 is O, S, CH2, S=O, CHF, or CF2, and B is a nucleosidic base such as adenine, guanine, uracil, cytosine, thymine, 2-aminoadenosine, 5-methylcytosine, 2,6-diaminopurine, or any other non-naturally occurring base that can be employed to be complementary or non-complementary to target RNA or a non-nucleosidic base such as phenyl, naphthyl, 3-nitropyrrole, 5-nitroindole, nebularine, pyridone, pyridinone, or any other non-naturally occurring universal base that can be complementary or non-complementary to target RNA.

The chemically-modified nucleotide or non-nucleotide of Formula III can be present in one or both oligonucleotide strands of the siNA duplex, for example, in the sense strand, the antisense strand, or both strands. The siNA molecules of the invention can comprise one or more chemically-modified nucleotide or non-nucleotide of Formula III at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense strand, the antisense strand, or both strands. For example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (*e.g.*, about 1, 2, 3, 4, 5, or more) chemically-

modified nucleotide(s) or non-nucleotide(s) of Formula III at the 5'-end of the sense strand, the antisense strand, or both strands. In another non-limiting example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (e.g., about 1, 2, 3, 4, 5, or more) chemically-modified nucleotide or non-nucleotide of Formula  
 5 III at the 3'-end of the sense strand, the antisense strand, or both strands.

In another embodiment, a siNA molecule of the invention comprises a nucleotide having Formula II or III, wherein the nucleotide having Formula II or III is in an inverted configuration. For example, the nucleotide having Formula II or III is connected to the siNA construct in a 3'-3', 3'-2', 2'-3', or 5'-5' configuration, such as at the 3'-end, the 5'-  
 10 end, or both of the 3' and 5'-ends of one or both siNA strands.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises a 5'-terminal phosphate group having Formula IV:



15

wherein each X and Y is independently O, S, N, alkyl, substituted alkyl, or alkylhalo; wherein each Z and W is independently O, S, N, alkyl, substituted alkyl, O-alkyl, S-alkyl, alkaryl, aralkyl, or alkylhalo; and wherein W, X, Y and Z are not all O.

In one embodiment, the invention features a siNA molecule having a 5'-terminal  
 20 phosphate group having Formula IV on the target-complementary strand, for example, a strand complementary to a target RNA, wherein the siNA molecule comprises an all RNA siNA molecule. In another embodiment, the invention features a siNA molecule having a 5'-terminal phosphate group having Formula IV on the target-complementary strand wherein the siNA molecule also comprises about 1 to about 3 (e.g., about 1, 2, or 3)  
 25 nucleotide 3'-terminal nucleotide overhangs having about 1 to about 4 (e.g., about 1, 2, 3, or 4) deoxyribonucleotides on the 3'-end of one or both strands. In another embodiment, a 5'-terminal phosphate group having Formula IV is present on the target-complementary

strand of a siNA molecule of the invention, for example a siNA molecule having chemical modifications having any of Formulae I-VII.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises one or more phosphorothioate internucleotide linkages. For example, in a non-limiting example, the invention features a chemically-modified short interfering nucleic acid (siNA) having about 1, 2, 3, 4, 5, 6, 7, 8 or more phosphorothioate internucleotide linkages in one siNA strand. In yet another embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) individually having about 1, 2, 3, 4, 5, 6, 7, 8 or more phosphorothioate internucleotide linkages in both siNA strands. The phosphorothioate internucleotide linkages can be present in one or both oligonucleotide strands of the siNA duplex, for example in the sense strand, the antisense strand, or both strands. The siNA molecules of the invention can comprise one or more phosphorothioate internucleotide linkages at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the sense strand, the antisense strand, or both strands. For example, an exemplary siNA molecule of the invention can comprise about 1 to about 5 or more (*e.g.*, about 1, 2, 3, 4, 5, or more) consecutive phosphorothioate internucleotide linkages at the 5'-end of the sense strand, the antisense strand, or both strands. In another non-limiting example, an exemplary siNA molecule of the invention can comprise one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) pyrimidine phosphorothioate internucleotide linkages in the sense strand, the antisense strand, or both strands. In yet another non-limiting example, an exemplary siNA molecule of the invention can comprise one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) purine phosphorothioate internucleotide linkages in the sense strand, the antisense strand, or both strands.

In one embodiment, the invention features a siNA molecule, wherein the sense strand comprises one or more, for example, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more phosphorothioate internucleotide linkages, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or about one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the sense strand; and wherein the antisense strand comprises about 1 to about 10 or

more, specifically about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more phosphorothioate internucleotide linkages, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the antisense strand. In another embodiment, one or more, for example about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more, pyrimidine nucleotides of the sense and/or antisense siNA strand are chemically-modified with 2'-deoxy, 2'-O-methyl and/or 2'-deoxy-2'-fluoro nucleotides, with or without one or more, for example about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more, phosphorothioate internucleotide linkages and/or a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends, being present in the same or different strand.

In another embodiment, the invention features a siNA molecule, wherein the sense strand comprises about 1 to about 5, specifically about 1, 2, 3, 4, or 5 phosphorothioate internucleotide linkages, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the sense strand; and wherein the antisense strand comprises about 1 to about 5 or more, specifically about 1, 2, 3, 4, 5, or more phosphorothioate internucleotide linkages, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the antisense strand. In another embodiment, one or more, for example about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more, pyrimidine nucleotides of the sense and/or antisense siNA strand are chemically-modified with 2'-deoxy, 2'-O-methyl and/or 2'-deoxy-2'-fluoro nucleotides, with or without about 1 to about 5 or more, for example about 1, 2, 3, 4, 5, or more phosphorothioate internucleotide linkages and/or a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends, being present in the same or different strand.

In one embodiment, the invention features a siNA molecule, wherein the antisense strand comprises one or more, for example, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more phosphorothioate internucleotide linkages, and/or about one or more (*e.g.*, about 1, 2, 3,

4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the sense strand; and wherein the antisense strand comprises about 1 to about 10 or more, specifically about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more phosphorothioate internucleotide linkages, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the antisense strand. In another embodiment, one or more, for example about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more pyrimidine nucleotides of the sense and/or antisense siNA strand are chemically-modified with 2'-deoxy, 2'-O-methyl and/or 2'-deoxy-2'-fluoro nucleotides, with or without one or more, for example, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more phosphorothioate internucleotide linkages and/or a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3' and 5'-ends, being present in the same or different strand.

In another embodiment, the invention features a siNA molecule, wherein the antisense strand comprises about 1 to about 5 or more, specifically about 1, 2, 3, 4, 5 or more phosphorothioate internucleotide linkages, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the sense strand; and wherein the antisense strand comprises about 1 to about 5 or more, specifically about 1, 2, 3, 4, 5 or more phosphorothioate internucleotide linkages, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) 2'-deoxy, 2'-O-methyl, 2'-deoxy-2'-fluoro, and/or one or more (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more) universal base modified nucleotides, and optionally a terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of the antisense strand. In another embodiment, one or more, for example about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more pyrimidine nucleotides of the sense and/or antisense siNA strand are chemically-modified with 2'-deoxy, 2'-O-methyl and/or 2'-deoxy-2'-fluoro nucleotides, with or without about 1 to about 5, for example about 1, 2, 3, 4, 5 or more phosphorothioate internucleotide linkages and/or a

terminal cap molecule at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends, being present in the same or different strand.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule having about 1 to about 5, specifically about 1, 2, 3, 4, 5 or  
5 more phosphorothioate internucleotide linkages in each strand of the siNA molecule.

In another embodiment, the invention features a siNA molecule comprising 2'-5' internucleotide linkages. The 2'-5' internucleotide linkage(s) can be at the 3'-end, the 5'-end, or both of the 3'- and 5'-ends of one or both siNA sequence strands. In addition, the 2'-5' internucleotide linkage(s) can be present at various other positions within one or both  
10 siNA sequence strands, for example, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more including every internucleotide linkage of a pyrimidine nucleotide in one or both strands of the siNA molecule can comprise a 2'-5' internucleotide linkage, or about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more including every internucleotide linkage of a purine nucleotide in one or both strands of the siNA molecule can comprise a 2'-5' internucleotide linkage.

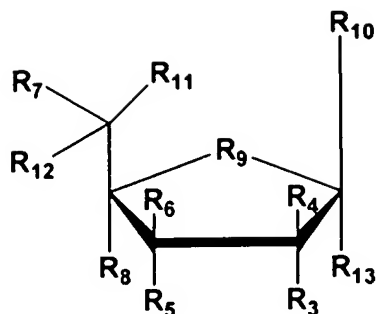
15 In another embodiment, a chemically-modified siNA molecule of the invention comprises a duplex having two strands, one or both of which can be chemically-modified, wherein each strand is about 18 to about 27 (*e.g.*, about 18, 19, 20, 21, 22, 23, 24, 25, 26, or 27) nucleotides in length, wherein the duplex has about 18 to about 23 (*e.g.*, about 18, 19, 20, 21, 22, or 23) base pairs, and wherein the chemical modification comprises a  
20 structure having any of Formulae I-VII. For example, an exemplary chemically-modified siNA molecule of the invention comprises a duplex having two strands, one or both of which can be chemically-modified with a chemical modification having any of Formulae I-VII or any combination thereof, wherein each strand consists of about 21 nucleotides, each having a 2-nucleotide 3'-terminal nucleotide overhang, and wherein the duplex has  
25 about 19 base pairs. In another embodiment, a siNA molecule of the invention comprises a single stranded hairpin structure, wherein the siNA is about 36 to about 70 (*e.g.*, about 36, 40, 45, 50, 55, 60, 65, or 70) nucleotides in length having about 18 to about 23 (*e.g.*, about 18, 19, 20, 21, 22, or 23) base pairs, and wherein the siNA can include a chemical modification comprising a structure having any of Formulae I-VII or any combination  
30 thereof. For example, an exemplary chemically-modified siNA molecule of the invention comprises a linear oligonucleotide having about 42 to about 50 (*e.g.*, about 42, 43, 44, 45,

46, 47, 48, 49, or 50) nucleotides that is chemically-modified with a chemical modification having any of Formulae I-VII or any combination thereof, wherein the linear oligonucleotide forms a hairpin structure having about 19 base pairs and a 2-nucleotide 3'-terminal nucleotide overhang. In another embodiment, a linear hairpin siNA molecule  
5 of the invention contains a stem loop motif, wherein the loop portion of the siNA molecule is biodegradable. For example, a linear hairpin siNA molecule of the invention is designed such that degradation of the loop portion of the siNA molecule *in vivo* can generate a double-stranded siNA molecule with 3'-terminal overhangs, such as 3'-terminal nucleotide overhangs comprising about 2 nucleotides.

10 In another embodiment, a siNA molecule of the invention comprises a circular nucleic acid molecule, wherein the siNA is about 38 to about 70 (*e.g.*, about 38, 40, 45, 50, 55, 60, 65, or 70) nucleotides in length having about 18 to about 23 (*e.g.*, about 18, 19, 20, 21, 22, or 23) base pairs, and wherein the siNA can include a chemical modification, which comprises a structure having any of Formulae I-VII or any  
15 combination thereof. For example, an exemplary chemically-modified siNA molecule of the invention comprises a circular oligonucleotide having about 42 to about 50 (*e.g.*, about 42, 43, 44, 45, 46, 47, 48, 49, or 50) nucleotides that is chemically-modified with a chemical modification having any of Formulae I-VII or any combination thereof, wherein the circular oligonucleotide forms a dumbbell shaped structure having about 19 base pairs  
20 and 2 loops.

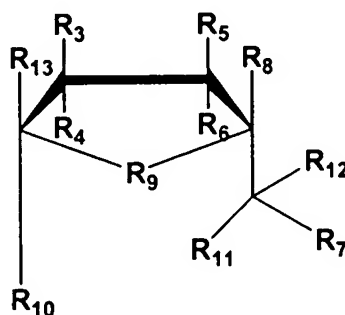
In another embodiment, a circular siNA molecule of the invention contains two loop motifs, wherein one or both loop portions of the siNA molecule is biodegradable. For example, a circular siNA molecule of the invention is designed such that degradation of the loop portions of the siNA molecule *in vivo* can generate a double-stranded siNA  
25 molecule with 3'-terminal overhangs, such as 3'-terminal nucleotide overhangs comprising about 2 nucleotides.

In one embodiment, a siNA molecule of the invention comprises at least one (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) abasic moiety, for example a compound having Formula V:



wherein each R3, R4, R5, R6, R7, R8, R10, R11, R12, and R13 is independently H, OH, alkyl, substituted alkyl, alkaryl or aralkyl, F, Cl, Br, CN, CF3, OCF3, OCN, O-alkyl, S-alkyl, N-alkyl, O-alkenyl, S-alkenyl, N-alkenyl, SO-alkyl, alkyl-OSH, alkyl-OH, O-alkyl-OH, O-alkyl-SH, S-alkyl-OH, S-alkyl-SH, alkyl-S-alkyl, alkyl-O-alkyl, ONO2, NO2, N3, NH2, aminoalkyl, aminoacid, aminoacyl, ONH2, O-aminoalkyl, O-aminoacid, O-aminoacyl, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino, substituted silyl, or group having Formula I; R9 is O, S, CH2, S=O, CHF, or CF2.

In one embodiment, a siNA molecule of the invention comprises at least one (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) inverted abasic moiety, for example a compound having Formula VI:

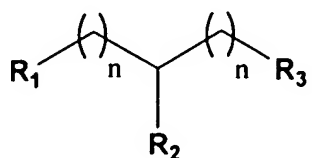


wherein each R3, R4, R5, R6, R7, R8, R10, R11, R12, and R13 is independently H, OH, alkyl, substituted alkyl, alkaryl or aralkyl, F, Cl, Br, CN, CF3, OCF3, OCN, O-alkyl, S-alkyl, N-alkyl, O-alkenyl, S-alkenyl, N-alkenyl, SO-alkyl, alkyl-OSH, alkyl-OH, O-alkyl-OH, O-alkyl-SH, S-alkyl-OH, S-alkyl-SH, alkyl-S-alkyl, alkyl-O-alkyl, ONO2, NO2, N3, NH2, aminoalkyl, aminoacid, aminoacyl, ONH2, O-aminoalkyl, O-aminoacid, O-aminoacyl, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino, substituted silyl, or group having Formula I; R9 is O, S, CH2, S=O, CHF, or CF2, and



either R<sub>2</sub>, R<sub>3</sub>, R<sub>8</sub> or R<sub>13</sub> serve as points of attachment to the siNA molecule of the invention.

In another embodiment, a siNA molecule of the invention comprises at least one (e.g., about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) substituted polyalkyl moieties, for example a compound having Formula VII:



wherein each n is independently an integer from 1 to 12, each R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> is independently H, OH, alkyl, substituted alkyl, alkaryl or aralkyl, F, Cl, Br, CN, CF<sub>3</sub>, OCF<sub>3</sub>, OCN, O-alkyl, S-alkyl, N-alkyl, O-alkenyl, S-alkenyl, N-alkenyl, SO-alkyl, alkyl-OSH, alkyl-OH, O-alkyl-OH, O-alkyl-SH, S-alkyl-OH, S-alkyl-SH, alkyl-S-alkyl, alkyl-O-alkyl, ONO<sub>2</sub>, NO<sub>2</sub>, N<sub>3</sub>, NH<sub>2</sub>, aminoalkyl, aminoacid, aminoacyl, ONH<sub>2</sub>, O-aminoalkyl, O-aminoacid, O-aminoacyl, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino, substituted silyl, or a group having Formula I, and R<sub>1</sub>, R<sub>2</sub> or R<sub>3</sub> serves as points of attachment to the siNA molecule of the invention.

In another embodiment, the invention features a compound having Formula VII, wherein R<sub>1</sub> and R<sub>2</sub> are hydroxyl (OH) groups, n = 1, and R<sub>3</sub> comprises O and is the point of attachment to the 3'-end, the 5'-end, or both of the 3' and 5'-ends of one or both strands of a double-stranded siNA molecule of the invention or to a single-stranded siNA molecule of the invention. This modification is referred to herein as "glyceryl" (for example modification 6 in Figure 22).

In another embodiment, a moiety having any of Formula V, VI or VII of the invention is at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of a siNA molecule of the invention. For example, a moiety having Formula V, VI or VII can be present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense strand, the sense strand, both antisense and sense strands of the siNA molecule. In addition, a moiety having Formula VII can be present at the 3'-end or the 5'-end of a hairpin siNA molecule as described herein.

In another embodiment, a siNA molecule of the invention comprises an abasic residue having Formula V or VI, wherein the abasic residue having Formula VI or VI is connected to the siNA construct in a 3'-3', 3'-2', 2'-3', or 5'-5' configuration, such as at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of one or both siNA strands.

5 In one embodiment, a siNA molecule of the invention comprises one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) locked nucleic acid (LNA) nucleotides, for example at the 5'-end, the 3'-end, both of the 5' and 3'-ends, or any combination thereof, of the siNA molecule.

10 In another embodiment, a siNA molecule of the invention comprises one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) acyclic nucleotides, for example at the 5'-end, the 3'-end, both of the 5' and 3'-ends, or any combination thereof, of the siNA molecule.

15 In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention, wherein the chemically-modified siNA comprises a sense region, where any (*e.g.*, one or more or all) pyrimidine nucleotides present in the sense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides (*e.g.*, wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and where any (*e.g.*, one or more or all) purine nucleotides present in the sense region are 2'-  
20 deoxy purine nucleotides (*e.g.*, wherein all purine nucleotides are 2'-deoxy purine nucleotides or alternately a plurality of purine nucleotides are 2'-deoxy purine nucleotides).

25 In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention, wherein the chemically-modified siNA comprises a sense region, where any (*e.g.*, one or more or all) pyrimidine nucleotides present in the sense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides (*e.g.*, wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and where any (*e.g.*, one or more or all) purine nucleotides present in the sense region are 2'-  
30 deoxy purine nucleotides (*e.g.*, wherein all purine nucleotides are 2'-deoxy purine nucleotides or alternately a plurality of purine nucleotides are 2'-deoxy purine

nucleotides), wherein any nucleotides comprising a 3'-terminal nucleotide overhang that are present in said sense region are 2'-deoxy nucleotides.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention, wherein the chemically-modified siNA comprises an antisense region, where any (*e.g.*, one or more or all) pyrimidine nucleotides present in the antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides (*e.g.*, wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any (*e.g.*, one or more or all) purine nucleotides present in the antisense region are 2'-O-methyl purine nucleotides (*e.g.*, wherein all purine nucleotides are 2'-O-methyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-O-methyl purine nucleotides).

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention, wherein the chemically-modified siNA comprises an antisense region, where any (*e.g.*, one or more or all) pyrimidine nucleotides present in the antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides (*e.g.*, wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any (*e.g.*, one or more or all) purine nucleotides present in the antisense region are 2'-O-methyl purine nucleotides (*e.g.*, wherein all purine nucleotides are 2'-O-methyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-O-methyl purine nucleotides), wherein any nucleotides comprising a 3'-terminal nucleotide overhang that are present in said antisense region are 2'-deoxy nucleotides.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention, wherein the chemically-modified siNA comprises an antisense region, where any (*e.g.*, one or more or all) pyrimidine nucleotides present in the antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides (*e.g.*, wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and where any (*e.g.*, one or more or all) purine nucleotides present in the antisense region are 2'-deoxy purine nucleotides (*e.g.*, wherein all purine nucleotides are

2'-deoxy purine nucleotides or alternately a plurality of purine nucleotides are 2'-deoxy purine nucleotides).

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemically-modified siNA comprises a sense region and an antisense region. The sense region comprises one or more 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more 2'-deoxy purine nucleotides (e.g., wherein all purine nucleotides are 2'-deoxy purine nucleotides or alternately a plurality of purine nucleotides are 2'-deoxy purine nucleotides). Inverted deoxy abasic modifications can be optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense region. The sense region optionally further comprises a 3'-terminal overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxyribonucleotides. The antisense region comprises one or more 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more 2'-O-methyl purine nucleotides (e.g., wherein all purine nucleotides are 2'-O-methyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-O-methyl purine nucleotides). A terminal cap modification, such as any modification described herein or shown in **Figure 22**, is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense sequence. The antisense region optionally further comprises a 3'-terminal nucleotide overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxynucleotides, wherein the overhang nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4) phosphorothioate internucleotide linkages. Non-limiting examples of these chemically-modified siNAs are shown in **Figures 18 and 19** and **Table IV** herein.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the siNA comprises a sense region and an antisense region, wherein the sense region comprises one or more 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-

fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more purine ribonucleotides (e.g., wherein all purine nucleotides are purine ribonucleotides or alternately a plurality of purine nucleotides are purine ribonucleotides) and wherein the antisense region comprises

5 one or more 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more 2'-O-methyl purine nucleotides (e.g., wherein all purine nucleotides are 2'-O-methyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-O-methyl purine

10 nucleotides). Inverted deoxy abasic modifications are optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense region. The sense region optionally further comprises a 3'-terminal overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxyribonucleotides. A terminal cap modification, such as any modification described herein or shown in **Figure 22**, is optionally present at the 3'-end, the 5'-end; or

15 both of the 3' and 5'-ends of the antisense sequence. The antisense region optionally further comprises a 3'-terminal nucleotide overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxynucleotides, wherein the overhang nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4 ) phosphorothioate internucleotide linkages. Non-limiting examples of these chemically-modified siNAs are shown in **Figures 18 and 19** and **Table**

20 **IV** herein.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid (siNA) molecule of the invention capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemically-modified siNA comprises a sense region and an antisense region, wherein the sense region

25 comprises one or 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more purine nucleotides selected from the group consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-

30 O-methyl nucleotides (e.g., wherein all purine nucleotides are selected from the group consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-O-methyl nucleotides or alternately

a plurality of purine nucleotides are selected from the group consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-O-methyl nucleotides) and wherein the antisense region comprises one or more 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine

5 nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and one or more purine nucleotides selected from the group consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-O-methyl nucleotides (e.g., wherein all purine nucleotides are selected from the group

10 consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-O-methyl nucleotides or alternately a plurality of purine nucleotides are selected from the group consisting of 2'-deoxy nucleotides, locked nucleic acid (LNA) nucleotides, 2'-methoxyethyl nucleotides, 4'-thionucleotides, and 2'-O-methyl nucleotides). Inverted deoxy abasic modifications are

15 optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the sense region. The sense region optionally further comprises a 3'-terminal overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxyribonucleotides. A terminal cap modification, such as any modification described herein or shown in **Figure 22**, is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense

20 sequence. The antisense region optionally further comprises a 3'-terminal nucleotide overhang having about 1 to about 4 (e.g., about 1, 2, 3, or 4) 2'-deoxynucleotides, wherein the overhang nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4) phosphorothioate internucleotide linkages.

In another embodiment, any modified nucleotides present in the siNA molecules of

25 the invention, preferably in the antisense strand of the siNA molecules of the invention, but also optionally in the sense and/or both antisense and sense strands, comprise modified nucleotides having properties or characteristics similar to naturally occurring ribonucleotides. For example, the invention features siNA molecules including modified nucleotides having a Northern conformation (e.g., Northern pseudorotation cycle, see for

30 example Saenger, *Principles of Nucleic Acid Structure*, Springer-Verlag ed., 1984). As such, chemically modified nucleotides present in the siNA molecules of the invention, preferably in the antisense strand of the siNA molecules of the invention, but also

optionally in the sense and/or both antisense and sense strands, are resistant to nuclease degradation while at the same time maintaining the capacity to mediate RNAi. Non-limiting examples of nucleotides having a northern configuration include locked nucleic acid (LNA) nucleotides (e.g., 2'-O,4'-C-methylene-(D-ribofuranosyl) nucleotides); 2'-methoxyethoxy (MOE) nucleotides; 2'-methyl-thio-ethyl, 2'-deoxy-2'-fluoro nucleotides, 2'-deoxy-2'-chloro nucleotides, 2'-azido nucleotides, and 2'-O-methyl nucleotides.

In one embodiment, the invention features a chemically-modified short interfering nucleic acid molecule (siNA) capable of mediating RNA interference (RNAi) inside a cell or reconstituted *in vitro* system, wherein the chemical modification comprises a conjugate covalently attached to the chemically-modified siNA molecule. In another embodiment, the conjugate is covalently attached to the chemically-modified siNA molecule via a biodegradable linker. In one embodiment, the conjugate molecule is attached at the 3'-end of either the sense strand, the antisense strand, or both strands of the chemically-modified siNA molecule. In another embodiment, the conjugate molecule is attached at the 5'-end of either the sense strand, the antisense strand, or both strands of the chemically-modified siNA molecule. In yet another embodiment, the conjugate molecule is attached both the 3'-end and 5'-end of either the sense strand, the antisense strand, or both strands of the chemically-modified siNA molecule, or any combination thereof. In one embodiment, a conjugate molecule of the invention comprises a molecule that facilitates delivery of a chemically-modified siNA molecule into a biological system, such as a cell. In another embodiment, the conjugate molecule attached to the chemically-modified siNA molecule is a poly ethylene glycol, human serum albumin, or a ligand for a cellular receptor that can mediate cellular uptake. Examples of specific conjugate molecules contemplated by the instant invention that can be attached to chemically-modified siNA molecules are described in Vargeese *et al.*, U.S. Serial No. 10/201,394, incorporated by reference herein. The type of conjugates used and the extent of conjugation of siNA molecules of the invention can be evaluated for improved pharmacokinetic profiles, bioavailability, and/or stability of siNA constructs while at the same time maintaining the ability of the siNA to mediate RNAi activity. As such, one skilled in the art can screen siNA constructs that are modified with various conjugates to determine whether the siNA conjugate complex possesses improved properties while

maintaining the ability to mediate RNAi, for example in animal models as are generally known in the art.

In one embodiment, the invention features a short interfering nucleic acid (siNA) molecule of the invention, wherein the siNA further comprises a nucleotide, non-nucleotide, or mixed nucleotide/non-nucleotide linker that joins the sense region of the  
 5 siNA to the antisense region of the siNA. In one embodiment, a nucleotide linker of the invention can be a linker of  $\geq 2$  nucleotides in length, for example 3, 4, 5, 6, 7, 8, 9, or 10 nucleotides in length. In another embodiment, the nucleotide linker can be a nucleic acid aptamer. By "aptamer" or "nucleic acid aptamer" as used herein is meant a nucleic acid  
 10 molecule that binds specifically to a target molecule wherein the nucleic acid molecule has sequence that comprises a sequence recognized by the target molecule in its natural setting. Alternately, an aptamer can be a nucleic acid molecule that binds to a target molecule where the target molecule does not naturally bind to a nucleic acid. The target molecule can be any molecule of interest. For example, the aptamer can be used to bind to  
 15 a ligand-binding domain of a protein, thereby preventing interaction of the naturally occurring ligand with the protein. This is a non-limiting example and those in the art will recognize that other embodiments can be readily generated using techniques generally known in the art. (See, for example, Gold *et al.*, 1995, *Annu. Rev. Biochem.*, 64, 763; Brody and Gold, 2000, *J. Biotechnol.*, 74, 5; Sun, 2000, *Curr. Opin. Mol. Ther.*, 2, 100; Kusser, 2000, *J. Biotechnol.*, 74, 27; Hermann and Patel, 2000, *Science*, 287, 820; and Jayasena, 1999, *Clinical Chemistry*, 45, 1628.)  
 20

In yet another embodiment, a non-nucleotide linker of the invention comprises abasic nucleotide, polyether, polyamine, polyamide, peptide, carbohydrate, lipid, polyhydrocarbon, or other polymeric compounds (e.g. polyethylene glycols such as those  
 25 having between 2 and 100 ethylene glycol units). Specific examples include those described by Seela and Kaiser, *Nucleic Acids Res.* 1990, 18:6353 and *Nucleic Acids Res.* 1987, 15:3113; Cload and Schepartz, *J. Am. Chem. Soc.* 1991, 113:6324; Richardson and Schepartz, *J. Am. Chem. Soc.* 1991, 113:5109; Ma *et al.*, *Nucleic Acids Res.* 1993, 21:2585 and *Biochemistry* 1993, 32:1751; Durand *et al.*, *Nucleic Acids Res.* 1990,  
 30 18:6353; McCurdy *et al.*, *Nucleosides & Nucleotides* 1991, 10:287; Jschke *et al.*, *Tetrahedron Lett.* 1993, 34:301; Ono *et al.*, *Biochemistry* 1991, 30:9914; Arnold *et al.*, International Publication No. WO 89/02439; Usman *et al.*, International Publication No.



WO 95/06731; Dudycz *et al.*, International Publication No. WO 95/11910 and Ferentz and Verdine, *J. Am. Chem. Soc.* 1991, 113:4000, all hereby incorporated by reference herein. A "non-nucleotide" further means any group or compound that can be incorporated into a nucleic acid chain in the place of one or more nucleotide units, including either sugar and/or phosphate substitutions, and allows the remaining bases to exhibit their enzymatic activity. The group or compound can be abasic in that it does not contain a commonly recognized nucleotide base, such as adenosine, guanine, cytosine, uracil or thymine, for example at the C1 position of the sugar.

In one embodiment, the invention features a short interfering nucleic acid (siNA) molecule capable of mediating RNA interference (RNAi) inside a cell or reconstituted in vitro system, wherein one or both strands of the siNA molecule that are assembled from two separate oligonucleotides do not comprise any ribonucleotides. For example, a siNA molecule can be assembled from a single oligonucleotide where the sense and antisense regions of the siNA comprise separate oligonucleotides not having any ribonucleotides (e.g., nucleotides having a 2'-OH group) present in the oligonucleotides. In another example, a siNA molecule can be assembled from a single oligonucleotide where the sense and antisense regions of the siNA are linked or circularized by a nucleotide or non-nucleotide linker as described herein, wherein the oligonucleotide does not have any ribonucleotides (e.g., nucleotides having a 2'-OH group) present in the oligonucleotide. Applicant has surprisingly found that the presence of ribonucleotides (e.g., nucleotides having a 2'-hydroxyl group) within the siNA molecule is not required or essential to support RNAi activity. As such, in one embodiment, all positions within the siNA can include chemically modified nucleotides and/or non-nucleotides such as nucleotides and or non-nucleotides having Formula I, II, III, IV, V, VI, or VII or any combination thereof to the extent that the ability of the siNA molecule to support RNAi activity in a cell is maintained.

In one embodiment, a siNA molecule of the invention is a single stranded siNA molecule that mediates RNAi activity in a cell or reconstituted in vitro system, wherein the siNA molecule comprises a single stranded polynucleotide having complementarity to a target nucleic acid sequence. In another embodiment, the single stranded siNA molecule of the invention comprises a 5'-terminal phosphate group. In another embodiment, the single stranded siNA molecule of the invention comprises a 5'-terminal

phosphate group and a 3'-terminal phosphate group (e.g., a 2', 3'-cyclic phosphate). In another embodiment, the single stranded siNA molecule of the invention comprises about 19 to about 29 nucleotides. In yet another embodiment, the single stranded siNA molecule of the invention comprises one or more chemically modified nucleotides or non-nucleotides described herein. For example, all the positions within the siNA molecule can include chemically-modified nucleotides such as nucleotides having any of Formulae I-VII, or any combination thereof to the extent that the ability of the siNA molecule to support RNAi activity in a cell is maintained.

In one embodiment, a siNA molecule of the invention is a single stranded siNA molecule that mediates RNAi activity in a cell or reconstituted in vitro system, wherein the siNA molecule comprises a single stranded polynucleotide having complementarity to a target nucleic acid sequence, and wherein one or more pyrimidine nucleotides present in the siNA are 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any purine nucleotides present in the antisense region are 2'-O-methyl purine nucleotides (e.g., wherein all purine nucleotides are 2'-O-methyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-O-methyl purine nucleotides), and a terminal cap modification, such as any modification described herein or shown in Figure 22, that is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense sequence, the siNA optionally further comprising about 1 to about 4 (e.g., about 1, 2, 3, or 4) terminal 2'-deoxynucleotides at the 3'-end of the siNA molecule, wherein the terminal nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4 ) phosphorothioate internucleotide linkages, and wherein the siNA optionally further comprises a terminal phosphate group, such as a 5'-terminal phosphate group.

In one embodiment, a siNA molecule of the invention is a single stranded siNA molecule that mediates RNAi activity in a cell or reconstituted in vitro system, wherein the siNA molecule comprises a single stranded polynucleotide having complementarity to a target nucleic acid sequence, and wherein one or more pyrimidine nucleotides present in the siNA are 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any

purine nucleotides present in the antisense region are 2'-deoxy purine nucleotides (e.g., wherein all purine nucleotides are 2'-deoxy purine nucleotides or alternately a plurality of purine nucleotides are 2'-deoxy purine nucleotides), and a terminal cap modification, such as any modification described herein or shown in **Figure 22**, that is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense sequence, the siNA optionally further comprising about 1 to about 4 (e.g., about 1, 2, 3, or 4) terminal 2'-deoxynucleotides at the 3'-end of the siNA molecule, wherein the terminal nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4 ) phosphorothioate internucleotide linkages, and wherein the siNA optionally further comprises a terminal phosphate group, such as a 5'-terminal phosphate group.

In one embodiment, a siNA molecule of the invention is a single stranded siNA molecule that mediates RNAi activity in a cell or reconstituted in vitro system, wherein the siNA molecule comprises a single stranded polynucleotide having complementarity to a target nucleic acid sequence, and wherein one or more pyrimidine nucleotides present in the siNA are 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any purine nucleotides present in the antisense region are locked nucleic acid (LNA) nucleotides (e.g., wherein all purine nucleotides are LNA nucleotides or alternately a plurality of purine nucleotides are LNA nucleotides), and a terminal cap modification, such as any modification described herein or shown in **Figure 22**, that is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense sequence, the siNA optionally further comprising about 1 to about 4 (e.g., about 1, 2, 3, or 4) terminal 2'-deoxynucleotides at the 3'-end of the siNA molecule, wherein the terminal nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4 ) phosphorothioate internucleotide linkages, and wherein the siNA optionally further comprises a terminal phosphate group, such as a 5'-terminal phosphate group.

In one embodiment, a siNA molecule of the invention is a single stranded siNA molecule that mediates RNAi activity in a cell or reconstituted in vitro system, wherein the siNA molecule comprises a single stranded polynucleotide having complementarity to a target nucleic acid sequence, and wherein one or more pyrimidine nucleotides present in the siNA are 2'-deoxy-2'-fluoro pyrimidine nucleotides (e.g., wherein all pyrimidine

nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides or alternately a plurality of pyrimidine nucleotides are 2'-deoxy-2'-fluoro pyrimidine nucleotides), and wherein any purine nucleotides present in the antisense region are 2'-methoxyethyl purine nucleotides (e.g., wherein all purine nucleotides are 2'-methoxyethyl purine nucleotides or alternately a plurality of purine nucleotides are 2'-methoxyethyl purine nucleotides), and a terminal cap modification, such as any modification described herein or shown in **Figure 22**, that is optionally present at the 3'-end, the 5'-end, or both of the 3' and 5'-ends of the antisense sequence, the siNA optionally further comprising about 1 to about 4 (e.g., about 1, 2, 3, or 4) terminal 2'-deoxynucleotides at the 3'-end of the siNA molecule, wherein the terminal nucleotides can further comprise one or more (e.g., 1, 2, 3, or 4 ) phosphorothioate internucleotide linkages, and wherein the siNA optionally further comprises a terminal phosphate group, such as a 5'-terminal phosphate group.

In another embodiment, any modified nucleotides present in the single stranded siNA molecules of the invention comprise modified nucleotides having properties or characteristics similar to naturally occurring ribonucleotides. For example, the invention features siNA molecules including modified nucleotides having a Northern conformation (e.g., Northern pseudorotation cycle, see for example Saenger, *Principles of Nucleic Acid Structure*, Springer-Verlag ed., 1984). As such, chemically modified nucleotides present in the single stranded siNA molecules of the invention are preferably resistant to nuclease degradation while at the same time maintaining the capacity to mediate RNAi.

In one embodiment, the invention features a method for modulating the expression of a gene within a cell comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the gene; and (b) introducing the siNA molecule into a cell under conditions suitable to modulate the expression of the gene in the cell.

In one embodiment, the invention features a method for modulating the expression of a gene within a cell comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the gene and wherein the sense strand sequence of the siNA comprises a sequence substantially similar to the sequence of the target RNA;

and (b) introducing the siNA molecule into a cell under conditions suitable to modulate the expression of the gene in the cell.

5 In another embodiment, the invention features a method for modulating the expression of more than one gene within a cell comprising: (a) synthesizing siNA molecules of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the genes; and (b) introducing the siNA molecules into a cell under conditions suitable to modulate the expression of the genes in the cell.

10 In another embodiment, the invention features a method for modulating the expression of more than one gene within a cell comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the gene and wherein the sense strand sequence of the siNA comprises a sequence substantially similar to the sequence of the target RNA; and (b) introducing the siNA molecules into a cell under conditions  
15 suitable to modulate the expression of the genes in the cell.

In one embodiment, siNA molecules of the invention are used as reagents in ex vivo applications. For example, siNA reagents are introduced into tissue or cells that are transplanted into a subject for therapeutic effect. The cells and/or tissue can be derived from an organism or subject that later receives the explant, or can be derived from another  
20 organism or subject prior to transplantation. The siNA molecules can be used to modulate the expression of one or more genes in the cells or tissue, such that the cells or tissue obtain a desired phenotype or are able to perform a function when transplanted in vivo. In one embodiment, certain target cells from a patient are extracted. These extracted cells are contacted with siNAs targeting a specific nucleotide sequence within  
25 the cells under conditions suitable for uptake of the siNAs by these cells (e.g. using delivery reagents such as cationic lipids, liposomes and the like or using techniques such as electroporation to facilitate the delivery of siNAs into cells). The cells are then reintroduced back into the same patient or other patients. Non-limiting examples of ex vivo applications include use in organ/tissue transplant, tissue grafting, or treatment of  
30 pulmonary disease (e.g., restenosis) or prevent neointimal hyperplasia and atherosclerosis in vein grafts. Such ex vivo applications may also used to treat conditions associated with

coronary and peripheral bypass graft failure, for example, such methods can be used in conjunction with peripheral vascular bypass graft surgery and coronary artery bypass graft surgery. Additional applications include transplants to treat CNS lesions or injury, including use in treatment of neurodegenerative conditions such as Alzheimer's disease,  
5 Parkinson's Disease, Epilepsy, Dementia, Huntington's disease, or amyotrophic lateral sclerosis (ALS).

In one embodiment, the invention features a method of modulating the expression of a gene in a tissue explant comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises  
10 a sequence complementary to RNA of the gene; and (b) introducing the siNA molecule into a cell of the tissue explant derived from a particular organism under conditions suitable to modulate the expression of the gene in the tissue explant. In another embodiment, the method further comprises introducing the tissue explant back into the organism the tissue was derived from or into another organism under conditions suitable  
15 to modulate the expression of the gene in that organism.

In one embodiment, the invention features a method of modulating the expression of a gene in a tissue explant comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the gene and wherein the sense strand sequence of  
20 the siNA comprises a sequence substantially similar to the sequence of the target RNA; and (b) introducing the siNA molecule into a cell of the tissue explant derived from a particular organism under conditions suitable to modulate the expression of the gene in the tissue explant. In another embodiment, the method further comprises introducing the tissue explant back into the organism the tissue was derived from or into another  
25 organism under conditions suitable to modulate the expression of the gene in that organism.

In another embodiment, the invention features a method of modulating the expression of more than one gene in a tissue explant comprising: (a) synthesizing siNA molecules of the invention, which can be chemically-modified, wherein one of the siNA  
30 strands comprises a sequence complementary to RNA of the genes; and (b) introducing the siNA molecules into a cell of the tissue explant derived from a particular organism

under conditions suitable to modulate the expression of the genes in the tissue explant. In another embodiment, the method further comprises introducing the tissue explant back into the organism the tissue was derived from or into another organism under conditions suitable to modulate the expression of the genes in that organism.

5           In one embodiment, the invention features a method of modulating the expression of a gene in an organism comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the gene; and (b) introducing the siNA molecule into the organism under conditions suitable to modulate the expression of the gene in the  
10           organism.

          In another embodiment, the invention features a method of modulating the expression of more than one gene in an organism comprising: (a) synthesizing siNA molecules of the invention, which can be chemically-modified, wherein one of the siNA strands comprises a sequence complementary to RNA of the genes; and (b) introducing  
15           the siNA molecules into the organism under conditions suitable to modulate the expression of the genes in the organism.

          In one embodiment, the invention features a method for modulating the expression of a gene within a cell comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein the siNA comprises a single stranded  
20           sequence having complementarity to RNA of the gene; and (b) introducing the siNA molecule into a cell under conditions suitable to modulate the expression of the gene in the cell.

          In another embodiment, the invention features a method for modulating the expression of more than one gene within a cell comprising: (a) synthesizing siNA  
25           molecules of the invention, which can be chemically-modified, wherein the siNA comprises a single stranded sequence having complementarity to RNA of the gene; and (b) contacting the siNA molecule with a cell in vitro or in vivo under conditions suitable to modulate the expression of the genes in the cell.

          In one embodiment, the invention features a method of modulating the expression  
30           of a gene in a tissue explant comprising: (a) synthesizing a siNA molecule of the

invention, which can be chemically-modified, wherein the siNA comprises a single stranded sequence having complementarity to RNA of the gene; and (b) contacting the siNA molecule with a cell of the tissue explant derived from a particular organism under conditions suitable to modulate the expression of the gene in the tissue explant. In another embodiment, the method further comprises introducing the tissue explant back into the organism the tissue was derived from or into another organism under conditions suitable to modulate the expression of the gene in that organism.

In another embodiment, the invention features a method of modulating the expression of more than one gene in a tissue explant comprising: (a) synthesizing siNA molecules of the invention, which can be chemically-modified, wherein the siNA comprises a single stranded sequence having complementarity to RNA of the gene; and (b) introducing the siNA molecules into a cell of the tissue explant derived from a particular organism under conditions suitable to modulate the expression of the genes in the tissue explant. In another embodiment, the method further comprises introducing the tissue explant back into the organism the tissue was derived from or into another organism under conditions suitable to modulate the expression of the genes in that organism.

In one embodiment, the invention features a method of modulating the expression of a gene in an organism comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein the siNA comprises a single stranded sequence having complementarity to RNA of the gene; and (b) introducing the siNA molecule into the organism under conditions suitable to modulate the expression of the gene in the organism.

In another embodiment, the invention features a method of modulating the expression of more than one gene in an organism comprising: (a) synthesizing siNA molecules of the invention, which can be chemically-modified, wherein the siNA comprises a single stranded sequence having complementarity to RNA of the gene; and (b) introducing the siNA molecules into the organism under conditions suitable to modulate the expression of the genes in the organism.

In one embodiment, the invention features a method of modulating the expression of a gene in an organism comprising contacting the organism with a siNA molecule of the



invention under conditions suitable to modulate the expression of the gene in the organism.

In another embodiment, the invention features a method of modulating the expression of more than one gene in an organism comprising contacting the organism  
5 with one or more siNA molecules of the invention under conditions suitable to modulate the expression of the genes in the organism.

The siNA molecules of the invention can be designed to inhibit target gene expression through RNAi targeting of a variety of RNA molecules. In one embodiment, the siNA molecules of the invention are used to target various RNAs corresponding to a  
10 target gene. Non-limiting examples of such RNAs include messenger RNA (mRNA), alternate RNA splice variants of target gene(s), post-transcriptionally modified RNA of target gene(s), pre-mRNA of target gene(s), and/or RNA templates. If alternate splicing produces a family of transcripts that are distinguished by usage of appropriate exons, the instant invention can be used to inhibit gene expression through the appropriate exons to  
15 specifically inhibit or to distinguish among the functions of gene family members. For example, a protein that contains an alternatively spliced transmembrane domain can be expressed in both membrane bound and secreted forms. Use of the invention to target the exon containing the transmembrane domain can be used to determine the functional consequences of pharmaceutical targeting of membrane bound as opposed to the secreted  
20 form of the protein. Non-limiting examples of applications of the invention relating to targeting these RNA molecules include therapeutic pharmaceutical applications, pharmaceutical discovery applications, molecular diagnostic and gene function applications, and gene mapping, for example using single nucleotide polymorphism mapping with siNA molecules of the invention. Such applications can be implemented  
25 using known gene sequences or from partial sequences available from an expressed sequence tag (EST).

In another embodiment, the siNA molecules of the invention are used to target conserved sequences corresponding to a gene family or gene families. As such, siNA molecules targeting multiple gene targets can provide increased therapeutic effect. In  
30 addition, siNA can be used to characterize pathways of gene function in a variety of applications. For example, the present invention can be used to inhibit the activity of

target gene(s) in a pathway to determine the function of uncharacterized gene(s) in gene function analysis, mRNA function analysis, or translational analysis. The invention can be used to determine potential target gene pathways involved in various diseases and conditions toward pharmaceutical development. The invention can be used to understand pathways of gene expression involved in, for example, in development, such as prenatal development and postnatal development, and/or the progression and/or maintenance of cancer, infectious disease, autoimmunity, inflammation, endocrine disorders, renal disease, pulmonary disease, cardiovascular disease, birth defects, ageing, any other disease or condition related to gene expression.

10 In one embodiment, the invention features a method comprising: (a) generating a library of siNA constructs having a predetermined complexity; and (b) assaying the siNA constructs of (a) above, under conditions suitable to determine RNAi target sites within the target RNA sequence. In another embodiment, the siNA molecules of (a) have strands of a fixed length, for example, about 23 nucleotides in length. In yet another embodiment, the siNA molecules of (a) are of differing length, for example having strands of about 19 to about 25 (e.g., about 19, 20, 21, 22, 23, 24, or 25) nucleotides in length. In one embodiment, the assay can comprise a reconstituted *in vitro* siNA assay as described herein. In another embodiment, the assay can comprise a cell culture system in which target RNA is expressed. In another embodiment, fragments of target RNA are analyzed for detectable levels of cleavage, for example by gel electrophoresis, northern blot analysis, or RNase protection assays, to determine the most suitable target site(s) within the target RNA sequence. The target RNA sequence can be obtained as is known in the art, for example, by cloning and/or transcription for *in vitro* systems, and by cellular expression in *in vivo* systems.

25 In one embodiment, the invention features a method comprising: (a) generating a randomized library of siNA constructs having a predetermined complexity, such as of  $4^N$ , where N represents the number of base paired nucleotides in each of the siNA construct strands (eg. for a siNA construct having 21 nucleotide sense and antisense strands with 19 base pairs, the complexity would be  $4^{19}$ ); and (b) assaying the siNA constructs of (a) above, under conditions suitable to determine RNAi target sites within the target RNA sequence. In another embodiment, the siNA molecules of (a) have strands of a fixed length, for example about 23 nucleotides in length. In yet another embodiment, the siNA

molecules of (a) are of differing length, for example having strands of about 19 to about 25 (*e.g.*, about 19, 20, 21, 22, 23, 24, or 25) nucleotides in length. In one embodiment, the assay can comprise a reconstituted *in vitro* siNA assay as described in Example 7 herein. In another embodiment, the assay can comprise a cell culture system in which target RNA is expressed. In another embodiment, fragments of target RNA are analyzed for detectable levels of cleavage, for example by gel electrophoresis, northern blot analysis, or RNase protection assays, to determine the most suitable target site(s) within the target RNA sequence. In another embodiment, the target RNA sequence can be obtained as is known in the art, for example, by cloning and/or transcription for *in vitro* systems, and by cellular expression in *in vivo* systems.

In another embodiment, the invention features a method comprising: (a) analyzing the sequence of a RNA target encoded by a target gene; (b) synthesizing one or more sets of siNA molecules having sequence complementary to one or more regions of the RNA of (a); and (c) assaying the siNA molecules of (b) under conditions suitable to determine RNAi targets within the target RNA sequence. In one embodiment, the siNA molecules of (b) have strands of a fixed length, for example about 23 nucleotides in length. In another embodiment, the siNA molecules of (b) are of differing length, for example having strands of about 19 to about 25 (*e.g.*, about 19, 20, 21, 22, 23, 24, or 25) nucleotides in length. In one embodiment, the assay can comprise a reconstituted *in vitro* siNA assay as described herein. In another embodiment, the assay can comprise a cell culture system in which target RNA is expressed. Fragments of target RNA are analyzed for detectable levels of cleavage, for example by gel electrophoresis, northern blot analysis, or RNase protection assays, to determine the most suitable target site(s) within the target RNA sequence. The target RNA sequence can be obtained as is known in the art, for example, by cloning and/or transcription for *in vitro* systems, and by expression in *in vivo* systems.

By "target site" is meant a sequence within a target RNA that is "targeted" for cleavage mediated by a siNA construct which contains sequences within its antisense region that are complementary to the target sequence.

By "detectable level of cleavage" is meant cleavage of target RNA (and formation of cleaved product RNAs) to an extent sufficient to discern cleavage products above the

background of RNAs produced by random degradation of the target RNA. Production of cleavage products from 1-5% of the target RNA is sufficient to detect above the background for most methods of detection.

In one embodiment, the invention features a composition comprising a siNA molecule of the invention, which can be chemically-modified, in a pharmaceutically acceptable carrier or diluent. In another embodiment, the invention features a pharmaceutical composition comprising siNA molecules of the invention, which can be chemically-modified, targeting one or more genes in a pharmaceutically acceptable carrier or diluent. In another embodiment, the invention features a method for treating or preventing a disease or condition in a subject, comprising administering to the subject a composition of the invention under conditions suitable for the treatment or prevention of the disease or condition in the subject, alone or in conjunction with one or more other therapeutic compounds. In yet another embodiment, the invention features a method for reducing or preventing tissue rejection in a subject comprising administering to the subject a composition of the invention under conditions suitable for the reduction or prevention of tissue rejection in the subject.

In another embodiment, the invention features a method for validating a gene target, comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands includes a sequence complementary to RNA of a target gene; (b) introducing the siNA molecule into a cell, tissue, or organism under conditions suitable for modulating expression of the target gene in the cell, tissue, or organism; and (c) determining the function of the gene by assaying for any phenotypic change in the cell, tissue, or organism.

In another embodiment, the invention features a method for validating a target gene comprising: (a) synthesizing a siNA molecule of the invention, which can be chemically-modified, wherein one of the siNA strands includes a sequence complementary to RNA of a target gene; (b) introducing the siNA molecule into a biological system under conditions suitable for modulating expression of the target gene in the biological system; and (c) determining the function of the gene by assaying for any phenotypic change in the biological system.

By "biological system" is meant, material, in a purified or unpurified form, from biological sources, including but not limited to human, animal, plant, insect, bacterial, viral or other sources, wherein the system comprises the components required for RNAi activity. The term "biological system" includes, for example, a cell, tissue, or organism,  
5 or extract thereof. The term biological system also includes reconstituted RNAi systems that can be used in an *in vitro* setting.

By "phenotypic change" is meant any detectable change to a cell that occurs in response to contact or treatment with a nucleic acid molecule of the invention (e.g., siNA). Such detectable changes include, but are not limited to, changes in shape, size,  
10 proliferation, motility, protein expression or RNA expression or other physical or chemical changes as can be assayed by methods known in the art. The detectable change can also include expression of reporter genes/molecules such as Green Florescent Protein (GFP) or various tags that are used to identify an expressed protein or any other cellular component that can be assayed.

15 In one embodiment, the invention features a kit containing a siNA molecule of the invention, which can be chemically-modified, that can be used to modulate the expression of a target gene in a cell, tissue, or organism. In another embodiment, the invention features a kit containing more than one siNA molecule of the invention, which can be chemically-modified, that can be used to modulate the expression of more than one target  
20 gene in a cell, tissue, or organism.

In one embodiment, the invention features a kit containing a siNA molecule of the invention, which can be chemically-modified, that can be used to modulate the expression of a target gene in a biological system. In another embodiment, the invention features a kit containing more than one siNA molecule of the invention, which can be chemically-  
25 modified, that can be used to modulate the expression of more than one target gene in a biological system.

In one embodiment, the invention features a cell containing one or more siNA molecules of the invention, which can be chemically-modified. In another embodiment, the cell containing a siNA molecule of the invention is a mammalian cell. In yet another  
30 embodiment, the cell containing a siNA molecule of the invention is a human cell.

In one embodiment, the synthesis of a siNA molecule of the invention, which can be chemically-modified, comprises: (a) synthesis of two complementary strands of the siNA molecule; (b) annealing the two complementary strands together under conditions suitable to obtain a double-stranded siNA molecule. In another embodiment, synthesis of  
5 the two complementary strands of the siNA molecule is by solid phase oligonucleotide synthesis. In yet another embodiment, synthesis of the two complementary strands of the siNA molecule is by solid phase tandem oligonucleotide synthesis.

In one embodiment, the invention features a method for synthesizing a siNA duplex molecule comprising: (a) synthesizing a first oligonucleotide sequence strand of the siNA  
10 molecule, wherein the first oligonucleotide sequence strand comprises a cleavable linker molecule that can be used as a scaffold for the synthesis of the second oligonucleotide sequence strand of the siNA; (b) synthesizing the second oligonucleotide sequence strand of siNA on the scaffold of the first oligonucleotide sequence strand, wherein the second oligonucleotide sequence strand further comprises a chemical moiety than can be used to  
15 purify the siNA duplex; (c) cleaving the linker molecule of (a) under conditions suitable for the two siNA oligonucleotide strands to hybridize and form a stable duplex; and (d) purifying the siNA duplex utilizing the chemical moiety of the second oligonucleotide sequence strand. In one embodiment, cleavage of the linker molecule in (c) above takes place during deprotection of the oligonucleotide, for example under hydrolysis conditions  
20 using an alkylamine base such as methylamine. In one embodiment, the method of synthesis comprises solid phase synthesis on a solid support such as controlled pore glass (CPG) or polystyrene, wherein the first sequence of (a) is synthesized on a cleavable linker, such as a succinyl linker, using the solid support as a scaffold. The cleavable linker in (a) used as a scaffold for synthesizing the second strand can comprise similar  
25 reactivity as the solid support derivatized linker, such that cleavage of the solid support derivatized linker and the cleavable linker of (a) takes place concomitantly. In another embodiment, the chemical moiety of (b) that can be used to isolate the attached oligonucleotide sequence comprises a trityl group, for example a dimethoxytrityl group, which can be employed in a trityl-on synthesis strategy as described herein. In yet  
30 another embodiment, the chemical moiety, such as a dimethoxytrityl group, is removed during purification, for example, using acidic conditions.

In a further embodiment, the method for siNA synthesis is a solution phase synthesis or hybrid phase synthesis wherein both strands of the siNA duplex are synthesized in tandem using a cleavable linker attached to the first sequence which acts a scaffold for synthesis of the second sequence. Cleavage of the linker under conditions  
5 suitable for hybridization of the separate siNA sequence strands results in formation of the double-stranded siNA molecule.

In another embodiment, the invention features a method for synthesizing a siNA duplex molecule comprising: (a) synthesizing one oligonucleotide sequence strand of the siNA molecule, wherein the sequence comprises a cleavable linker molecule that can be  
10 used as a scaffold for the synthesis of another oligonucleotide sequence; (b) synthesizing a second oligonucleotide sequence having complementarity to the first sequence strand on the scaffold of (a), wherein the second sequence comprises the other strand of the double-stranded siNA molecule and wherein the second sequence further comprises a chemical moiety than can be used to isolate the attached oligonucleotide sequence; (c) purifying the  
15 product of (b) utilizing the chemical moiety of the second oligonucleotide sequence strand under conditions suitable for isolating the full-length sequence comprising both siNA oligonucleotide strands connected by the cleavable linker and under conditions suitable for the two siNA oligonucleotide strands to hybridize and form a stable duplex. In one embodiment, cleavage of the linker molecule in (c) above takes place during  
20 deprotection of the oligonucleotide, for example under hydrolysis conditions. In another embodiment, cleavage of the linker molecule in (c) above takes place after deprotection of the oligonucleotide. In another embodiment, the method of synthesis comprises solid phase synthesis on a solid support such as controlled pore glass (CPG) or polystyrene, wherein the first sequence of (a) is synthesized on a cleavable linker, such as a succinyl  
25 linker, using the solid support as a scaffold. The cleavable linker in (a) used as a scaffold for synthesizing the second strand can comprise similar reactivity or differing reactivity as the solid support derivatized linker, such that cleavage of the solid support derivatized linker and the cleavable linker of (a) takes place either concomitantly or sequentially. In one embodiment, the chemical moiety of (b) that can be used to isolate the attached  
30 oligonucleotide sequence comprises a trityl group, for example a dimethoxytrityl group.

In another embodiment, the invention features a method for making a double-stranded siNA molecule in a single synthetic process comprising: (a) synthesizing an

oligonucleotide having a first and a second sequence, wherein the first sequence is complementary to the second sequence, and the first oligonucleotide sequence is linked to the second sequence via a cleavable linker, and wherein a terminal 5'-protecting group, for example, a 5'-O-dimethoxytrityl group (5'-O-DMT) remains on the oligonucleotide  
5 having the second sequence; (b) deprotecting the oligonucleotide whereby the deprotection results in the cleavage of the linker joining the two oligonucleotide sequences; and (c) purifying the product of (b) under conditions suitable for isolating the double-stranded siNA molecule, for example using a trityl-on synthesis strategy as described herein.

10 In another embodiment, the method of synthesis of siNA molecules of the invention comprises the teachings of Scaringe *et al.*, US Patent Nos. 5,889,136; 6,008,400; and 6,111,086, incorporated by reference herein in their entirety.

In one embodiment, the invention features siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the siNA construct comprises one or more chemical  
15 modifications, for example, one or more chemical modifications having any of Formulae I-VII or any combination thereof that increases the nuclease resistance of the siNA construct.

In another embodiment, the invention features a method for generating siNA molecules with increased nuclease resistance comprising (a) introducing nucleotides  
20 having any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having increased nuclease resistance.

In one embodiment, the invention features siNA constructs that mediate RNAi against a target gene, wherein the siNA construct comprises one or more chemical  
25 modifications described herein that modulates the binding affinity between the sense and antisense strands of the siNA construct.

In another embodiment, the invention features a method for generating siNA molecules with increased binding affinity between the sense and antisense strands of the siNA molecule comprising (a) introducing nucleotides having any of Formula I-VII or  
30 any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of



step (a) under conditions suitable for isolating siNA molecules having increased binding affinity between the sense and antisense strands of the siNA molecule.

In one embodiment, the invention features siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the siNA construct comprises one or more chemical  
5 modifications described herein that modulates the binding affinity between the antisense strand of the siNA construct and a complementary target RNA sequence within a cell.

In one embodiment, the invention features siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the siNA construct comprises one or more chemical modifications described herein that modulates the binding affinity between the antisense  
10 strand of the siNA construct and a complementary target DNA sequence within a cell.

In another embodiment, the invention features a method for generating siNA molecules with increased binding affinity between the antisense strand of the siNA molecule and a complementary target RNA sequence comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA  
15 molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having increased binding affinity between the antisense strand of the siNA molecule and a complementary target RNA sequence.

In another embodiment, the invention features a method for generating siNA molecules with increased binding affinity between the antisense strand of the siNA molecule and a complementary target DNA sequence comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA  
20 molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having increased binding affinity between the antisense strand of the siNA molecule and a complementary target DNA sequence.

25 In one embodiment, the invention features siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the siNA construct comprises one or more chemical modifications described herein that modulate the polymerase activity of a cellular polymerase capable of generating additional endogenous siNA molecules having sequence homology to the chemically-modified siNA construct.

In another embodiment, the invention features a method for generating siNA molecules capable of mediating increased polymerase activity of a cellular polymerase capable of generating additional endogenous siNA molecules having sequence homology to a chemically-modified siNA molecule comprising (a) introducing nucleotides having  
5 any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules capable of mediating increased polymerase activity of a cellular polymerase capable of generating additional endogenous siNA molecules having sequence homology to the chemically-modified siNA molecule.

10 In one embodiment, the invention features chemically-modified siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the chemical modifications do not significantly effect the interaction of siNA with a target RNA molecule, DNA molecule and/or proteins or other factors that are essential for RNAi in a manner that would decrease the efficacy of RNAi mediated by such siNA constructs.

15 In another embodiment, the invention features a method for generating siNA molecules with improved RNAi activity, comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved RNAi activity.

20 In yet another embodiment, the invention features a method for generating siNA molecules with improved RNAi activity against a target RNA comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved RNAi activity against the target RNA.

25 In yet another embodiment, the invention features a method for generating siNA molecules with improved RNAi activity against a DNA target comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved RNAi activity against the DNA target, such as  
30 a gene, chromosome, or portion thereof.

In one embodiment, the invention features siNA constructs that mediate RNAi in a cell or reconstituted system, wherein the siNA construct comprises one or more chemical modifications described herein that modulates the cellular uptake of the siNA construct.

5 In another embodiment, the invention features a method for generating siNA molecules against a target gene with improved cellular uptake comprising (a) introducing nucleotides having any of Formula I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved cellular uptake.

10 In one embodiment, the invention features siNA constructs that mediate RNAi against a target gene, wherein the siNA construct comprises one or more chemical modifications described herein that increases the bioavailability of the siNA construct, for example, by attaching polymeric conjugates such as polyethyleneglycol or equivalent conjugates that improve the pharmacokinetics of the siNA construct, or by attaching conjugates that target specific tissue types or cell types *in vivo*. Non-limiting examples of  
15 such conjugates are described in Vargeese *et al.*, U.S. Serial No. 10/201,394 incorporated by reference herein.

In one embodiment, the invention features a method for generating siNA molecules of the invention with improved bioavailability, comprising (a) introducing a conjugate into the structure of a siNA molecule, and (b) assaying the siNA molecule of step (a)  
20 under conditions suitable for isolating siNA molecules having improved bioavailability. Such conjugates can include ligands for cellular receptors, such as peptides derived from naturally occurring protein ligands; protein localization sequences, including cellular ZIP code sequences; antibodies; nucleic acid aptamers; vitamins and other co-factors, such as folate and N-acetylgalactosamine; polymers, such as polyethyleneglycol (PEG);  
25 phospholipids; polyamines, such as spermine or spermidine; and others.

In another embodiment, the invention features a method for generating siNA molecules of the invention with improved bioavailability comprising (a) introducing an excipient formulation to a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved bioavailability.  
30 Such excipients include polymers such as cyclodextrins, lipids, cationic lipids, polyamines, phospholipids, and others.

In another embodiment, the invention features a method for generating siNA molecules of the invention with improved bioavailability comprising (a) introducing nucleotides having any of Formulae I-VII or any combination thereof into a siNA molecule, and (b) assaying the siNA molecule of step (a) under conditions suitable for isolating siNA molecules having improved bioavailability.

In another embodiment, polyethylene glycol (PEG) can be covalently attached to siNA compounds of the present invention. The attached PEG can be any molecular weight, preferably from about 2,000 to about 50,000 daltons (Da).

The present invention can be used alone or as a component of a kit having at least one of the reagents necessary to carry out the *in vitro* or *in vivo* introduction of RNA to test samples and/or subjects. For example, preferred components of the kit include a siNA molecule of the invention and a vehicle that promotes introduction of the siNA into cells of interest as described herein (e.g., using lipids and other methods of transfection known in the art, see for example Beigelman *et al.*, US 6,395,713). The kit can be used for target validation, such as in determining gene function and/or activity, or in drug optimization, and in drug discovery (see for example Usman *et al.*, USSN 60/402,996). Such a kit can also include instructions to allow a user of the kit to practice the invention.

The term "short interfering nucleic acid", "siNA", "short interfering RNA", "siRNA", "short interfering nucleic acid molecule", "short interfering oligonucleotide molecule", or "chemically-modified short interfering nucleic acid molecule" as used herein refers to any nucleic acid molecule capable of inhibiting or down regulating gene expression or viral replication, for example by mediating RNA interference "RNAi" or gene silencing in a sequence-specific manner; see for example Bass, 2001, *Nature*, 411, 428-429; Elbashir *et al.*, 2001, *Nature*, 411, 494-498; and Kreutzer *et al.*, International PCT Publication No. WO 00/44895; Zernicka-Goetz *et al.*, International PCT Publication No. WO 01/36646; Fire, International PCT Publication No. WO 99/32619; Plaetinck *et al.*, International PCT Publication No. WO 00/01846; Mello and Fire, International PCT Publication No. WO 01/29058; Deschamps-Depaillette, International PCT Publication No. WO 99/07409; and Li *et al.*, International PCT Publication No. WO 00/44914; Allshire, 2002, *Science*, 297, 1818-1819; Volpe *et al.*, 2002, *Science*, 297, 1833-1837; Jenuwein, 2002, *Science*, 297, 2215-2218; and Hall *et al.*, 2002, *Science*, 297, 2232-2237;

Hutvagner and Zamore, 2002, *Science*, 297, 2056-60; McManus *et al.*, 2002, *RNA*, 8, 842-850; Reinhart *et al.*, 2002, *Gene & Dev.*, 16, 1616-1626; and Reinhart & Bartel, 2002, *Science*, 297, 1831). Non limiting examples of siNA molecules of the invention are shown in **Figures 4-6, and Tables II, III, and IV** herein. For example the siNA can be a

5 double-stranded polynucleotide molecule comprising self-complementary sense and antisense regions, wherein the antisense region comprises nucleotide sequence that is complementary to nucleotide sequence in a target nucleic acid molecule or a portion thereof and the sense region having nucleotide sequence corresponding to the target nucleic acid sequence or a portion thereof. The siNA can be assembled from two separate

10 oligonucleotides, where one strand is the sense strand and the other is the antisense strand, wherein the antisense and sense strands are self-complementary (i.e. each strand comprises nucleotide sequence that is complementary to nucleotide sequence in the other strand; such as where the antisense strand and sense strand form a duplex or double stranded structure, for example wherein the double stranded region is about 19 base

15 pairs); the antisense strand comprises nucleotide sequence that is complementary to nucleotide sequence in a target nucleic acid molecule or a portion thereof and the sense strand comprises nucleotide sequence corresponding to the target nucleic acid sequence or a portion thereof. Alternatively, the siNA is assembled from a single oligonucleotide, where the self-complementary sense and antisense regions of the siNA are linked by

20 means of a nucleic acid based or non-nucleic acid-based linker(s). The siNA can be a polynucleotide with a hairpin secondary structure, having self-complementary sense and antisense regions, wherein the antisense region comprises nucleotide sequence that is complementary to nucleotide sequence in a separate target nucleic acid molecule or a portion thereof and the sense region having nucleotide sequence corresponding to the

25 target nucleic acid sequence or a portion thereof. The siNA can be a circular single-stranded polynucleotide having two or more loop structures and a stem comprising self-complementary sense and antisense regions, wherein the antisense region comprises nucleotide sequence that is complementary to nucleotide sequence in a target nucleic acid molecule or a portion thereof and the sense region having nucleotide sequence

30 corresponding to the target nucleic acid sequence or a portion thereof, and wherein the circular polynucleotide can be processed either *in vivo* or *in vitro* to generate an active siNA molecule capable of mediating RNAi. The siNA can also comprise a single stranded polynucleotide having nucleotide sequence complementary to nucleotide

sequence in a target nucleic acid molecule or a portion thereof (for example, where such siNA molecule does not require the presence within the siNA molecule of nucleotide sequence corresponding to the target nucleic acid sequence or a portion thereof), wherein the single stranded polynucleotide can further comprise a terminal phosphate group, such as a 5'-phosphate (see for example Martinez *et al.*, 2002, *Cell.*, 110, 563-574 and Schwarz *et al.*, 2002, *Molecular Cell*, 10, 537-568), or 5',3'-diphosphate. In certain embodiment, the siNA molecule of the invention comprises separate sense and antisense sequences or regions, wherein the sense and antisense regions are covalently linked by nucleotide or non-nucleotide linkers molecules as is known in the art, or are alternately non-covalently linked by ionic interactions, hydrogen bonding, van der waals interactions, hydrophobic interactions, and/or stacking interactions. In certain embodiments, the siNA molecules of the invention comprise nucleotide sequence that is complementary to nucleotide sequence of a target gene. In another embodiment, the siNA molecule of the invention interacts with nucleotide sequence of a target gene in a manner that causes inhibition of expression of the target gene. As used herein, siNA molecules need not be limited to those molecules containing only RNA, but further encompasses chemically-modified nucleotides and non-nucleotides. In certain embodiments, the short interfering nucleic acid molecules of the invention lack 2'-hydroxy (2'-OH) containing nucleotides. Applicant describes in certain embodiments short interfering nucleic acids that do not require the presence of nucleotides having a 2'-hydroxy group for mediating RNAi and as such, short interfering nucleic acid molecules of the invention optionally do not include any ribonucleotides (e.g., nucleotides having a 2'-OH group). Such siNA molecules that do not require the presence of ribonucleotides within the siNA molecule to support RNAi can however have an attached linker or linkers or other attached or associated groups, moieties, or chains containing one or more nucleotides with 2'-OH groups. Optionally, siNA molecules can comprise ribonucleotides at about 5, 10, 20, 30, 40, or 50% of the nucleotide positions. The modified short interfering nucleic acid molecules of the invention can also be referred to as short interfering modified oligonucleotides "siMON." As used herein, the term siNA is meant to be equivalent to other terms used to describe nucleic acid molecules that are capable of mediating sequence specific RNAi, for example short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), short hairpin RNA (shRNA), short interfering oligonucleotide, short interfering nucleic acid, short interfering modified

oligonucleotide, chemically-modified siRNA, post-transcriptional gene silencing RNA (ptgsRNA), and others. In addition, as used herein, the term RNAi is meant to be equivalent to other terms used to describe sequence specific RNA interference, such as post transcriptional gene silencing, or epigenetics. For example, siNA molecules of the invention can be used to epigenetically silence genes at both the post-transcriptional level or the pre-transcriptional level. In a non-limiting example, epigenetic regulation of gene expression by siNA molecules of the invention can result from siNA mediated modification of chromatin structure to alter gene expression (see, for example, Allshire, 2002, *Science*, 297, 1818-1819; Volpe *et al.*, 2002, *Science*, 297, 1833-1837; Jenuwein, 2002, *Science*, 297, 2215-2218; and Hall *et al.*, 2002, *Science*, 297, 2232-2237).

By "modulate" is meant that the expression of the gene, or level of RNA molecule or equivalent RNA molecules encoding one or more proteins or protein subunits, or activity of one or more proteins or protein subunits is up regulated or down regulated, such that expression, level, or activity is greater than or less than that observed in the absence of the modulator. For example, the term "modulate" can mean "inhibit," but the use of the word "modulate" is not limited to this definition.

By "inhibit" it is meant that the activity of a gene expression product or level of RNAs or equivalent RNAs encoding one or more gene products is reduced below that observed in the absence of the nucleic acid molecule of the invention. In one embodiment, inhibition with a siNA molecule preferably is below that level observed in the presence of an inactive or attenuated molecule that is unable to mediate an RNAi response. In another embodiment, inhibition of gene expression with the siNA molecule of the instant invention is greater in the presence of the siNA molecule than in its absence.

By "inhibit", "down-regulate", or "reduce", it is meant that the expression of the gene, or level of RNA molecules or equivalent RNA molecules encoding one or more proteins or protein subunits, or activity of one or more proteins or protein subunits, is reduced below that observed in the absence of the nucleic acid molecules (e.g., siNA) of the invention. In one embodiment, inhibition, down-regulation or reduction with an siNA molecule is below that level observed in the presence of an inactive or attenuated molecule. In another embodiment, inhibition, down-regulation, or reduction with siNA

molecules is below that level observed in the presence of, for example, an siNA molecule with scrambled sequence or with mismatches. In another embodiment, inhibition, down-regulation, or reduction of gene expression with a nucleic acid molecule of the instant invention is greater in the presence of the nucleic acid molecule than in its absence.

5 By "gene" or "target gene" is meant, a nucleic acid that encodes an RNA, for example, nucleic acid sequences including, but not limited to, structural genes encoding a polypeptide. The target gene can be a gene derived from a cell, an endogenous gene, a transgene, or exogenous genes such as genes of a pathogen, for example a virus, which is present in the cell after infection thereof. The cell containing the target gene can be  
10 derived from or contained in any organism, for example a plant, animal, protozoan, virus, bacterium, or fungus. Non-limiting examples of plants include monocots, dicots, or gymnosperms. Non-limiting examples of animals include vertebrates or invertebrates. Non-limiting examples of fungi include molds or yeasts.

By "endogenous" or "cellular" gene is meant a gene normally found in a cell in its  
15 natural location in the genome. For example, HER-2, VEGF, VEGF-R, EGFR, BCL-2, c-MYC, RAS and the like would be considered an endogenous gene. Genes expressed in a cell from a plasmid, viral vector or other vectors or from virus, bacteria, fungi would be considered "foreign" or "heterologous" gene; such genes are not normally found in the host cell, but are introduced by standard gene transfer techniques or as a result of  
20 infection by a virus, bacterial or other infectious agent.

By "gene family" is meant a group of more than one nucleic acid molecules that share at least one common characteristic, such as sequence homology, target specificity, mode of action, secondary structure, or the ability to modulate a process or more than one process in a biological system. The gene family can be of viral or cellular origin. The  
25 gene family can encode, for example, groups of cytokines, receptors, growth factors, adapter proteins, structural proteins, and other protein epitopes.

By "protein family" is meant a group of more than one proteins, peptides, or polypeptides that share at least one common characteristic, such as sequence homology, target specificity, mode of action, secondary structure, or the ability to modulate a process  
30 or more than one process in a biological system. The protein family can be of viral or



cellular origin. The protein family can encode, for example, groups of cytokines, receptors, growth factors, adapter proteins, structural proteins, and other protein epitopes.

By "highly conserved sequence region" is meant, a nucleotide sequence of one or more regions in a target gene does not vary significantly from one generation to the other  
5 or from one biological system to the other.

By "cancer" is meant a group of diseases characterized by uncontrolled growth and spread of abnormal cells.

By "sense region" is meant a nucleotide sequence of a siNA molecule having complementarity to an antisense region of the siNA molecule. In addition, the sense  
10 region of a siNA molecule can comprise a nucleic acid sequence having homology with a target nucleic acid sequence.

By "antisense region" is meant a nucleotide sequence of a siNA molecule having complementarity to a target nucleic acid sequence. In addition, the antisense region of a siNA molecule can optionally comprise a nucleic acid sequence having complementarity  
15 to a sense region of the siNA molecule.

By "target nucleic acid" is meant any nucleic acid sequence whose expression or activity is to be modulated. The target nucleic acid can be DNA or RNA.

By "complementarity" is meant that a nucleic acid can form hydrogen bond(s) with another nucleic acid sequence by either traditional Watson-Crick or other non-traditional  
20 types. In reference to the nucleic molecules of the present invention, the binding free energy for a nucleic acid molecule with its complementary sequence is sufficient to allow the relevant function of the nucleic acid to proceed, e.g., RNAi activity. Determination of binding free energies for nucleic acid molecules is well known in the art (see, e.g., Turner  
25 *et al.*, 1987, *CSH Symp. Quant. Biol.* LII pp.123-133; Frier *et al.*, 1986, *Proc. Nat. Acad. Sci. USA* 83:9373-9377; Turner *et al.*, 1987, *J. Am. Chem. Soc.* 109:3783-3785). A percent complementarity indicates the percentage of contiguous residues in a nucleic acid molecule that can form hydrogen bonds (e.g., Watson-Crick base pairing) with a second nucleic acid sequence (e.g., 5, 6, 7, 8, 9, 10 out of 10 being 50%, 60%, 70%, 80%, 90%, and 100% complementary). "Perfectly complementary" means that all the contiguous

residues of a nucleic acid sequence will hydrogen bond with the same number of contiguous residues in a second nucleic acid sequence.

The siNA molecules of the invention represent a novel therapeutic approach to a broad spectrum of diseases and conditions, including cancer or cancerous disease, infectious disease, cardiovascular disease, neurological disease, prion disease, inflammatory disease, autoimmune disease, pulmonary disease, renal disease, liver disease, mitochondrial disease, endocrine disease, reproduction related diseases and conditions, and any other indications that can respond to the level of an expressed gene product in a cell or organism.

In one embodiment of the present invention, each sequence of a siNA molecule of the invention is independently about 18 to about 24 nucleotides in length, in specific embodiments about 18, 19, 20, 21, 22, 23, or 24 nucleotides in length. In another embodiment, the siNA duplexes of the invention independently comprise about 17 to about 23 base pairs (*e.g.*, about 17, 18, 19, 20, 21, 22 or 23). In yet another embodiment, siNA molecules of the invention comprising hairpin or circular structures are about 35 to about 55 (*e.g.*, about 35, 40, 45, 50 or 55) nucleotides in length, or about 38 to about 44 (*e.g.*, 38, 39, 40, 41, 42, 43 or 44) nucleotides in length and comprising about 16 to about 22 (*e.g.*, about 16, 17, 18, 19, 20, 21 or 22) base pairs. Exemplary siNA molecules of the invention are shown in **Table II**. Exemplary synthetic siNA molecules of the invention are shown in **Table I** and/or **Figures 18-19**.

As used herein "cell" is used in its usual biological sense, and does not refer to an entire multicellular organism, *e.g.*, specifically does not refer to a human. The cell can be present in an organism, *e.g.*, birds, plants and mammals such as humans, cows, sheep, apes, monkeys, swine, dogs, and cats. The cell can be prokaryotic or eukaryotic (*e.g.*, mammalian or plant cell). The cell can be of somatic or germ line origin, totipotent or pluripotent, dividing or non-dividing. The cell can also be derived from or can comprise a gamete or embryo, a stem cell, or a fully differentiated cell.

The siNA molecules of the invention are added directly, or can be complexed with cationic lipids, packaged within liposomes, or otherwise delivered to target cells or tissues. The nucleic acid or nucleic acid complexes can be locally administered to relevant tissues *ex vivo*, or *in vivo* through injection, infusion pump or stent, with or

without their incorporation in biopolymers. In particular embodiments, the nucleic acid molecules of the invention comprise sequences shown in **Tables I-II** and/or **Figures 18-19**. Examples of such nucleic acid molecules consist essentially of sequences defined in these tables and figures. Furthermore, the chemically modified constructs described in  
5 **Table IV** can be applied to any siNA sequence of the invention.

In another aspect, the invention provides mammalian cells containing one or more siNA molecules of this invention. The one or more siNA molecules can independently be targeted to the same or different sites.

By "RNA" is meant a molecule comprising at least one ribonucleotide residue. By  
10 "ribonucleotide" is meant a nucleotide with a hydroxyl group at the 2' position of a  $\beta$ -D-ribo-furanose moiety. The terms include double-stranded RNA, single-stranded RNA, isolated RNA such as partially purified RNA, essentially pure RNA, synthetic RNA, recombinantly produced RNA, as well as altered RNA that differs from naturally occurring RNA by the addition, deletion, substitution and/or alteration of one or more  
15 nucleotides. Such alterations can include addition of non-nucleotide material, such as to the end(s) of the siNA or internally, for example at one or more nucleotides of the RNA. Nucleotides in the RNA molecules of the instant invention can also comprise non-standard nucleotides, such as non-naturally occurring nucleotides or chemically synthesized nucleotides or deoxynucleotides. These altered RNAs can be referred to as  
20 analogs or analogs of naturally-occurring RNA.

By "subject" is meant an organism, which is a donor or recipient of explanted cells or the cells themselves. "Subject" also refers to an organism to which the nucleic acid molecules of the invention can be administered. In one embodiment, a subject is a mammal or mammalian cells. In another embodiment, a subject is a human or human  
25 cells.

The term "phosphorothioate" as used herein refers to an internucleotide linkage having Formula I, wherein Z and/or W comprise a sulfur atom. Hence, the term phosphorothioate refers to both phosphorothioate and phosphorodithioate internucleotide linkages.

The term "universal base" as used herein refers to nucleotide base analogs that form base pairs with each of the natural DNA/RNA bases with little discrimination between them. Non-limiting examples of universal bases include C-phenyl, C-naphthyl and other aromatic derivatives, inosine, azole carboxamides, and nitroazole derivatives such as 3-nitropyrrole, 4-nitroindole, 5-nitroindole, and 6-nitroindole as known in the art (see for example Loakes, 2001, *Nucleic Acids Research*, 29, 2437-2447).

The term "acyclic nucleotide" as used herein refers to any nucleotide having an acyclic ribose sugar, for example where any of the ribose carbons (C1, C2, C3, C4, or C5), are independently or in combination absent from the nucleotide.

The nucleic acid molecules of the instant invention, individually, or in combination or in conjunction with other drugs, can be used to treat diseases or conditions discussed herein. For example, to treat a particular disease or condition, the siNA molecules can be administered to a subject or can be administered to other appropriate cells evident to those skilled in the art, individually or in combination with one or more drugs under conditions suitable for the treatment.

In a further embodiment, the siNA molecules can be used in combination with other known treatments to treat conditions or diseases discussed above. For example, the described molecules could be used in combination with one or more known therapeutic agents to treat a disease or condition. Non-limiting examples of other therapeutic agents that can be readily combined with a siNA molecule of the invention are enzymatic nucleic acid molecules, allosteric nucleic acid molecules, antisense, decoy, or aptamer nucleic acid molecules, antibodies such as monoclonal antibodies, small molecules, and other organic and/or inorganic compounds including metals, salts and ions.

In one embodiment, the invention features an expression vector comprising a nucleic acid sequence encoding at least one siNA molecule of the invention, in a manner which allows expression of the siNA molecule. For example, the vector can contain sequence(s) encoding both strands of a siNA molecule comprising a duplex. The vector can also contain sequence(s) encoding a single nucleic acid molecule that is self-complementary and thus forms a siNA molecule. Non-limiting examples of such expression vectors are described in Paul *et al.*, 2002, *Nature Biotechnology*, 19, 505; Miyagishi and Taira, 2002, *Nature Biotechnology*, 19, 497; Lee *et al.*, 2002, *Nature*

*Biotechnology*, 19, 500; and Novina *et al.*, 2002, *Nature Medicine*, advance online publication doi:10.1038/nm725.

In another embodiment, the invention features a mammalian cell, for example, a human cell, including an expression vector of the invention.

5           In yet another embodiment, the expression vector of the invention comprises a sequence for a siRNA molecule having complementarity to a RNA molecule referred to by a Genbank Accession number in Table III.

          In yet another embodiment, the expression vector of the invention comprises a sequence for a siNA molecule having complementarity to a RNA molecule referred to by  
10       a Genbank Accession numbers, for example Genbank Accession Nos. shown in **Table I**.

In one embodiment, an expression vector of the invention comprises a nucleic acid sequence encoding two or more siNA molecules, which can be the same or different.

          In another aspect of the invention, siRNA molecules that interact with target RNA molecules and down-regulate gene encoding target RNA molecules (for example target  
15       RNA molecules referred to by Genbank Accession number in Table III) are expressed from transcription units inserted into DNA or RNA vectors. The recombinant vectors can be DNA plasmids or viral vectors. siNA expressing viral vectors can be constructed based on, but not limited to, adeno-associated virus, retrovirus, adenovirus, or alphavirus. The recombinant vectors capable of expressing the siNA molecules can be delivered as  
20       described herein, and persist in target cells. Alternatively, viral vectors can be used that provide for transient expression of siNA molecules. Such vectors can be repeatedly administered as necessary. Once expressed, the siNA molecules bind and down-regulate gene function or expression via RNA interference (RNAi). Delivery of siNA expressing vectors can be systemic, such as by intravenous or intramuscular administration, by  
25       administration to target cells ex-planted from a subject followed by reintroduction into the subject, or by any other means that would allow for introduction into the desired target cell.

By "vectors" is meant any nucleic acid- and/or viral-based technique used to deliver a desired nucleic acid.

Other features and advantages of the invention will be apparent from the following description of the preferred embodiments thereof, and from the claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

**Figure 1** shows a non-limiting example of a scheme for the synthesis of siNA molecules. The complementary siNA sequence strands, strand 1 and strand 2, are synthesized in tandem and are connected by a cleavable linkage, such as a nucleotide succinate or abasic succinate, which can be the same or different from the cleavable linker used for solid phase synthesis on a solid support. The synthesis can be either solid phase or solution phase, in the example shown, the synthesis is a solid phase synthesis. The synthesis is performed such that a protecting group, such as a dimethoxytrityl group, remains intact on the terminal nucleotide of the tandem oligonucleotide. Upon cleavage and deprotection of the oligonucleotide, the two siNA strands spontaneously hybridize to form a siNA duplex, which allows the purification of the duplex by utilizing the properties of the terminal protecting group, for example by applying a trityl on purification method wherein only duplexes/oligonucleotides with the terminal protecting group are isolated.

**Figure 2** shows a MALDI-TOV mass spectrum of a purified siNA duplex synthesized by a method of the invention. The two peaks shown correspond to the predicted mass of the separate siNA sequence strands. This result demonstrates that the siNA duplex generated from tandem synthesis can be purified as a single entity using a simple trityl-on purification methodology.

**Figure 3** shows the results of a stability assay used to determine the serum stability of chemically modified siNA constructs compared to a siNA control consisting of all RNA with 3'-TT termini.  $T_{1/2}$  values are shown for duplex stability.

**Figure 4** shows the results of an RNAi activity screen of phosphorothioate modified siNA constructs using a luciferase reporter system.

**Figure 5** shows the results of an RNAi activity screen of phosphorothioate and universal base modified siNA constructs using a luciferase reporter system.

**Figure 6** shows the results of an RNAi activity screen of 2'-O-methyl modified siNA constructs using a luciferase reporter system.

**Figure 7** shows the results of an RNAi activity screen of 2'-O-methyl and 2'-deoxy-2'-fluoro modified siNA constructs using a luciferase reporter system.

5        **Figure 8** shows the results of an RNAi activity screen of a phosphorothioate modified siNA construct using a luciferase reporter system.

**Figure 9** shows the results of an RNAi activity screen of an inverted deoxyabasic modified siNA construct generated via tandem synthesis using a luciferase reporter system.

10        **Figure 10** shows the results of an RNAi activity screen of chemically modified siNA constructs including 3'-glyceryl modified siNA constructs compared to an all RNA control siNA construct using a luciferase reporter system. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal  
15 dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I.

20        **Figure 11** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal  
25 dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I.

**Figure 12** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. In addition, the antisense strand alone (RPI 30430) and an inverted control (RPI 30227/30229, having matched chemistry to RPI 30063/30224) was compared to the siNA duplexes described above.

**Figure 13** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. In addition, an inverted control (RPI 30226/30229, having matched chemistry to RPI 30222/30224) was compared to the siNA duplexes described above.

**Figure 14** shows the results of an RNAi activity screen of chemically modified siNA constructs including various 3'-terminal modified siNA constructs compared to an all RNA control siNA construct using a luciferase reporter system. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI



number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I.

**Figure 15** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemistries compared to a fixed antisense strand chemistry. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I.

**Figure 16** shows the results of a siNA titration study wherein the RNAi activity of a phosphorothioate modified siNA construct is compared to that of a siNA construct consisting of all ribonucleotides except for two terminal thymidine residues using a luciferase reporter system.

**Figure 17** shows a non-limiting proposed mechanistic representation of target RNA degradation involved in RNAi. Double-stranded RNA (dsRNA), which is generated by RNA-dependent RNA polymerase (RdRP) from foreign single-stranded RNA, for example viral, transposon, or other exogenous RNA, activates the DICER enzyme that in turn generates siNA duplexes. Alternately, synthetic or expressed siNA can be introduced directly into a cell by appropriate means. An active siNA complex forms which recognizes a target RNA, resulting in degradation of the target RNA by the RISC endonuclease complex or in the synthesis of additional RNA by RNA-dependent RNA polymerase (RdRP), which can activate DICER and result in additional siNA molecules, thereby amplifying the RNAi response.

**Figure 18A-F** shows non-limiting examples of chemically-modified siNA constructs of the present invention. In the figure, N stands for any nucleotide (adenosine, guanosine, cytosine, uridine, or optionally thymidine, for example thymidine can be substituted in the overhanging regions designated by parenthesis (N N). Various modifications are shown for the sense and antisense strands of the siNA constructs.

**Figure 18A:** The sense strand comprises 21 nucleotides having four phosphorothioate 5'- and 3'-terminal internucleotide linkages, wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-O-methyl or 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target RNA sequence, and having one 3'-terminal phosphorothioate internucleotide linkage and four 5'-terminal phosphorothioate internucleotide linkages and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein.

**Figure 18B:** The sense strand comprises 21 nucleotides wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-O-methyl or 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target RNA sequence, and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein.

**Figure 18C:** The sense strand comprises 21 nucleotides having 5'- and 3'- terminal cap moieties wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-O-methyl or 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target RNA sequence, and having one 3'-terminal phosphorothioate internucleotide linkage and wherein all pyrimidine nucleotides that may be present are 2'-

deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein.

**Figure 18D:** The sense strand comprises 21 nucleotides having 5'- and 3'- terminal cap moieties wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein and wherein all purine nucleotides that may be present are 2'-deoxy nucleotides. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target RNA sequence, and having one 3'-terminal phosphorothioate internucleotide linkage and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides and all purine nucleotides that may be present are 2'-O-methyl modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein.

**Figure 18E:** The sense strand comprises 21 nucleotides having 5'- and 3'- terminal cap moieties wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target RNA sequence, and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides and all purine nucleotides that may be present are 2'-O-methyl modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein.

**Figure 18F:** The sense strand comprises 21 nucleotides having 5'- and 3'- terminal cap moieties wherein the two terminal 3'-nucleotides are optionally base paired and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified

nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The antisense strand comprises 21 nucleotides, optionally having a 3'-terminal glyceryl moiety and wherein the two terminal 3'-nucleotides are optionally complementary to the target  
 5 RNA sequence, and having one 3'-terminal phosphorothioate internucleotide linkage and wherein all pyrimidine nucleotides that may be present are 2'-deoxy-2'-fluoro modified nucleotides and all purine nucleotides that may be present are 2'-deoxy modified nucleotides except for (N N) nucleotides, which can comprise ribonucleotides, deoxynucleotides, universal bases, or other chemical modifications described herein. The  
 10 antisense strand of constructs A-F comprise sequence complementary to target RNA sequence of the invention.

**Figure 19** shows non-limiting examples of specific chemically modified siNA sequences of the invention. A-F applies the chemical modifications described in **Figure 18A-F** to a representative siNA sequence targeting the EGFR (HER1).

15 **Figure 20** shows non-limiting examples of different siNA constructs of the invention. The examples shown (constructs 1, 2, and 3) have 19 representative base pairs, however, different embodiments of the invention include any number of base pairs described herein. Bracketed regions represent nucleotide overhangs, for example comprising between about 1, 2, 3, or 4 nucleotides in length, preferably about 2  
 20 nucleotides. Constructs 1 and 2 can be used independently for RNAi activity. Construct 2 can comprise a polynucleotide or non-nucleotide linker, which can optionally be designed as a biodegradable linker. In one embodiment, the loop structure shown in construct 2 can comprise a biodegradable linker that results in the formation of construct 1 in vivo and/or in vitro. In another example, construct 3 can be used to generate  
 25 construct 2 under the same principle wherein a linker is used to generate the active siNA construct 2 in vivo and/or in vitro, which can optionally utilize another biodegradable linker to generate the active siNA construct 1 in vivo and/or in vitro. As such, the stability and/or activity of the siNA constructs can be modulated based on the design of the siNA construct for use in vivo or in vitro and/or in vitro.

30 **Figure 21** is a diagrammatic representation of a method used to determine target sites for siNA mediated RNAi within a particular target nucleic acid sequence, such as

messenger RNA. (A) A pool of siNA oligonucleotides are synthesized wherein the antisense region of the siNA constructs has complementarity to target sites across the target nucleic acid sequence, and wherein the sense region comprises sequence complementary to the antisense region of the siNA. (B) The sequences are transfected  
 5 into cells. (C) Cells are selected based on phenotypic change that is associated with modulation of the target nucleic acid sequence. (D) The siNA is isolated from the selected cells and is sequenced to identify efficacious target sites within the target nucleic acid sequence.

**Figure 22** shows non-limiting examples of different stabilization chemistries (1-10)  
 10 that can be used, for example, to stabilize the 3'-end of siNA sequences of the invention, including (1) [3-3']-inverted deoxyribose; (2) deoxyribonucleotide; (3) [5'-3']-3'-deoxyribonucleotide; (4) [5'-3']-ribonucleotide; (5) [5'-3']-3'-O-methyl ribonucleotide; (6) 3'-glyceryl; (7) [3'-5']-3'-deoxyribonucleotide; (8) [3'-3']-deoxyribonucleotide; (9) [5'-2']-deoxyribonucleotide; and (10) [5-3']-dideoxyribonucleotide. In addition to modified and  
 15 unmodified backbone chemistries indicated in the figure, these chemistries can be combined with different backbone modifications as described herein, for example, backbone modifications having Formula I. In addition, the 2'-deoxy nucleotide shown 5' to the terminal modifications shown can be another modified or unmodified nucleotide or non-nucleotide described herein, for example modifications having any of Formulae I-VII  
 20 or any combination thereof.

**Figure 23** shows a non-limiting example of siNA mediated inhibition of VEGF-induced angiogenesis using the rat corneal model of angiogenesis. siNA targeting site 2340 of VEGFR1 RNA (shown as RPI No. sense strand/antisense strand) were compared to inverted controls (shown as RPI No. sense strand/antisense strand) at three different  
 25 concentrations and compared to a VEGF control in which no siNA was administered.

**Figure 24** shows a non-limiting example of a strategy used to identify chemically modified siNA constructs of the invention that are nuclease resistance while preserving the ability to mediate RNAi activity. Chemical modifications are introduced into the siNA construct based on educated design parameters (e.g. introducing 2'-modifications, base modifications, backbone modifications, terminal cap modifications etc). The  
 30 modified construct is tested in an appropriate system (e.g. human serum for nuclease

resistance, shown, or an animal model for PK/delivery parameters). In parallel, the siNA construct is tested for RNAi activity, for example in a cell culture system such as a luciferase reporter assay). Lead siNA constructs are then identified which possess a particular characteristic while maintaining RNAi activity, and can be further modified and  
5 assayed once again. This same approach can be used to identify siNA-conjugate molecules with improved pharmacokinetic profiles, delivery, and RNAi activity.

**Figure 25** shows a non-limiting example of reduction of HER2 mRNA in A549 cells mediated by RNA-based and chemically-modified siNAs that target HER2 mRNA sites 2344 and 3706. A549 cells were transfected with 4 ug/ml lipid complexed with 25  
10 nM unmodified siNA with a 3'-terminal dithymidine cap (RPI#28266/28267) or a corresponding inverted control (RPI#28268/28269) for site 2344 and (RPI#28262/28263) and a corresponding inverted control (RPI 28264/28265) for site 3706. In addition, A549 cells were transfected with 4 ug/ml lipid complexed with 25 nM modified siNA (RPI#30442/30443) and a corresponding matched control (RPI#30444/30445) for site  
15 2344 and (RPI#30438/30439) and a corresponding matched control (RPI 30440/30441) for site 3706. As shown in the figures, the modified and unmodified constructs targeting sites 2344 and 3706 all demonstrate significant inhibition of HER2 RNA expression.

**Figure 26** shows a non-limiting example of reduction of PKC-alpha mRNA in A549 cells mediated by chemically-modified siNAs that target PKC-alpha mRNA. A549  
20 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A screen of siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps was compared to untreated cells, scrambled siNA control constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, all of the siNA constructs show significant reduction of PKC-alpha RNA expression.

**Figure 27** shows a non-limiting example of reduction of Myc (c-Myc) mRNA in 293T cells mediated by chemically-modified siNAs that target c-Myc mRNA. 293T cells  
25 were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A screen of siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps was compared to untreated cells, scrambled siNA control constructs (Scram1 and Scram2),  
30 and cells transfected with lipid alone (transfection control). As shown in the figure, three

of the siNA constructs (RPI 30993/31069; RPI 30995/31071; and RPI 30996/31072) show significant reduction of c-Myc RNA expression.

**Figure 28** shows a non-limiting example of reduction of BCL2 mRNA in A549 cells mediated by chemically-modified siNAs that target BCL2 mRNA. A549 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#30998/31074) was tested along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31368/31369), which was also compared to a matched chemistry inverted control (RPI#31370/31371) and a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine and 2'-deoxy-2'-fluoro purine nucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31372/31373) which was also compared to a matched chemistry inverted control (RPI#31374/31375). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, the siNA constructs show significant reduction of BCL2 RNA expression compared to scrambled, untreated, and transfection controls.

**Figure 29** shows a non-limiting example of reduction of CHK-1 mRNA in A549 cells mediated by chemically-modified siNAs that target CHK-1 mRNA. A549 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31003/31079) and a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and in which the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31302/31303), were compared to a matched chemistry inverted control (RPI#31314/31325). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2),

and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs show significant reduction of CHK-1 RNA expression compared to appropriate controls.

**Figure 30** shows a non-limiting example of reduction of BACE mRNA in A549 cells mediated by siNAs that target BACE mRNA. A549 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A screen of siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps was compared to untreated cells, scrambled siNA control constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, all of the siNA constructs show significant reduction of BACE RNA expression.

**Figure 31** shows a non-limiting example of reduction of cyclin D1 mRNA in A549 cells mediated by chemically-modified siNAs that target cyclin D1 mRNA. A549 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31009/31085) was compared to a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31304/31305), which was also compared to a matched chemistry inverted control (RPI#31316/31317). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs show significant reduction of cyclin D1 RNA expression.

**Figure 32** shows a non-limiting example of reduction of PTP-1B mRNA in A549 cells mediated by chemically-modified siNAs that target PTP-1B mRNA. A549 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31018/31307) was compared to a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage



(RPI#31306/31307), which was also compared to a matched chemistry inverted control (RPI#31318/31319). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both  
 5 siNA constructs show significant reduction of PTP-1B RNA expression.

**Figure 33** shows a non-limiting example of reduction of ERG2 mRNA in DLD1 cells mediated by siNAs that target ERG2 mRNA. DLD1 cells were transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A screen of siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps was compared to untreated  
 10 cells, scrambled siNA control constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, all of the siNA constructs show significant reduction of ERG2 RNA expression.

**Figure 34** shows a non-limiting example of reduction of PCNA mRNA in A549 cells mediated by chemically-modified siNAs that target PCNA mRNA. A549 cells were  
 15 transfected with 0.25 ug/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31035/31111) was compared to a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense  
 20 strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31310/31311), which was also compared to a matched chemistry inverted control (RPI#31322/31323). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both  
 25 siNA constructs show significant reduction of PCNA RNA expression.

## DETAILED DESCRIPTION OF THE INVENTION

### Mechanism of action of Nucleic Acid Molecules of the Invention

The discussion that follows discusses the proposed mechanism of RNA interference mediated by short interfering RNA as is presently known, and is not meant to be limiting  
 30 and is not an admission of prior art. Applicant demonstrates herein that chemically-

modified short interfering nucleic acids possess similar or improved capacity to mediate RNAi as do siRNA molecules and are expected to possess improved stability and activity *in vivo*; therefore, this discussion is not meant to be limiting only to siRNA and can be applied to siNA as a whole. By "improved capacity to mediate RNAi" or "improved RNAi activity" is meant to include RNAi activity measured *in vitro* and/or *in vivo* where the RNAi activity is a reflection of both the ability of the siNA to mediate RNAi and the stability of the siNAs of the invention. In this invention, the product of these activities can be increased *in vitro* and/or *in vivo* compared to an all RNA siRNA or a siNA containing a plurality of ribonucleotides. In some cases, the activity or stability of the siNA molecule can be decreased (i.e., less than ten-fold), but the overall activity of the siNA molecule is enhanced *in vitro* and/or *in vivo*.

RNA interference refers to the process of sequence specific post-transcriptional gene silencing in animals mediated by short interfering RNAs (siRNAs) (Fire *et al.*, 1998, *Nature*, 391, 806). The corresponding process in plants is commonly referred to as post-transcriptional gene silencing or RNA silencing and is also referred to as quelling in fungi. The process of post-transcriptional gene silencing is thought to be an evolutionarily-conserved cellular defense mechanism used to prevent the expression of foreign genes which is commonly shared by diverse flora and phyla (Fire *et al.*, 1999, *Trends Genet.*, 15, 358). Such protection from foreign gene expression may have evolved in response to the production of double-stranded RNAs (dsRNAs) derived from viral infection or the random integration of transposon elements into a host genome via a cellular response that specifically destroys homologous single-stranded RNA or viral genomic RNA. The presence of dsRNA in cells triggers the RNAi response through a mechanism that has yet to be fully characterized. This mechanism appears to be different from the interferon response that results from dsRNA-mediated activation of protein kinase PKR and 2', 5'-oligoadenylate synthetase resulting in non-specific cleavage of mRNA by ribonuclease L.

The presence of long dsRNAs in cells stimulates the activity of a ribonuclease III enzyme referred to as Dicer. Dicer is involved in the processing of the dsRNA into short pieces of dsRNA known as short interfering RNAs (siRNAs) (Berstein *et al.*, 2001, *Nature*, 409, 363). Short interfering RNAs derived from Dicer activity are typically about 21 to about 23 nucleotides in length and comprise about 19 base pair duplexes. Dicer has

also been implicated in the excision of 21- and 22-nucleotide small temporal RNAs (stRNAs) from precursor RNA of conserved structure that are implicated in translational control (Hutvagner *et al.*, 2001, *Science*, 293, 834). The RNAi response also features an endonuclease complex containing a siRNA, commonly referred to as an RNA-induced silencing complex (RISC), which mediates cleavage of single-stranded RNA having sequence homologous to the siRNA. Cleavage of the target RNA takes place in the middle of the region complementary to the guide sequence of the siRNA duplex (Elbashir *et al.*, 2001, *Genes Dev.*, 15, 188). In addition, RNA interference can also involve small RNA (e.g., micro-RNA or miRNA) mediated gene silencing, presumably through cellular mechanisms that regulate chromatin structure and thereby prevent transcription of target gene sequences (see for example Allshire, 2002, *Science*, 297, 1818-1819; Volpe *et al.*, 2002, *Science*, 297, 1833-1837; Jenuwein, 2002, *Science*, 297, 2215-2218; and Hall *et al.*, 2002, *Science*, 297, 2232-2237). As such, siRNA molecules of the invention can be used to mediate gene silencing via interaction with RNA transcripts or alternately by interaction with particular gene sequences, wherein such interaction results in gene silencing either at the transcriptional level or post-transcriptional level.

RNAi has been studied in a variety of systems. Fire *et al.*, 1998, *Nature*, 391, 806, were the first to observe RNAi in *C. elegans*. Wianny and Goetz, 1999, *Nature Cell Biol.*, 2, 70, describe RNAi mediated by dsRNA in mouse embryos. Hammond *et al.*, 2000, *Nature*, 404, 293, describe RNAi in *Drosophila* cells transfected with dsRNA. Elbashir *et al.*, 2001, *Nature*, 411, 494, describe RNAi induced by introduction of duplexes of synthetic 21-nucleotide RNAs in cultured mammalian cells including human embryonic kidney and HeLa cells. Recent work in *Drosophila* embryonic lysates has revealed certain requirements for siRNA length, structure, chemical composition, and sequence that are essential to mediate efficient RNAi activity. These studies have shown that 21 nucleotide siRNA duplexes are most active when containing two 2-nucleotide 3'-terminal nucleotide overhangs. Furthermore, substitution of one or both siRNA strands with 2'-deoxy or 2'-O-methyl nucleotides abolishes RNAi activity, whereas substitution of 3'-terminal siRNA nucleotides with deoxy nucleotides was shown to be tolerated. Mismatch sequences in the center of the siRNA duplex were also shown to abolish RNAi activity. In addition, these studies also indicate that the position of the cleavage site in the target RNA is defined by the 5'-end of the siRNA guide sequence rather than the 3'-end

(Elbashir *et al.*, 2001, *EMBO J.*, 20, 6877). Other studies have indicated that a 5'-phosphate on the target-complementary strand of a siRNA duplex is required for siRNA activity and that ATP is utilized to maintain the 5'-phosphate moiety on the siRNA (Nykanen *et al.*, 2001, *Cell*, 107, 309); however, siRNA molecules lacking a 5'-phosphate  
 5 are active when introduced exogenously, suggesting that 5'-phosphorylation of siRNA constructs may occur *in vivo*.

### Synthesis of Nucleic acid Molecules

Synthesis of nucleic acids greater than 100 nucleotides in length is difficult using automated methods, and the therapeutic cost of such molecules is prohibitive. In this  
 10 invention, small nucleic acid motifs "small" refers to nucleic acid motifs no more than 100 nucleotides in length, preferably no more than 80 nucleotides in length, and most preferably no more than 50 nucleotides in length; *e.g.*, individual siNA oligonucleotide sequences or siNA sequences synthesized in tandem) are preferably used for exogenous delivery. The simple structure of these molecules increases the ability of the nucleic acid  
 15 to invade targeted regions of protein and/or RNA structure. Exemplary molecules of the instant invention are chemically synthesized, and others can similarly be synthesized.

Oligonucleotides (*e.g.*, certain modified oligonucleotides or portions of oligonucleotides lacking ribonucleotides) are synthesized using protocols known in the art, for example as described in Caruthers *et al.*, 1992, *Methods in Enzymology* 211, 3-19,  
 20 Thompson *et al.*, International PCT Publication No. WO 99/54459, Wincott *et al.*, 1995, *Nucleic Acids Res.* 23, 2677-2684, Wincott *et al.*, 1997, *Methods Mol. Bio.*, 74, 59, Brennan *et al.*, 1998, *Biotechnol Bioeng.*, 61, 33-45, and Brennan, U.S. Pat. No. 6,001,311. All of these references are incorporated herein by reference. The synthesis of oligonucleotides makes use of common nucleic acid protecting and coupling groups, such  
 25 as dimethoxytrityl at the 5'-end, and phosphoramidites at the 3'-end. In a non-limiting example, small scale syntheses are conducted on a 394 Applied Biosystems, Inc. synthesizer using a 0.2  $\mu$ mol scale protocol with a 2.5 min coupling step for 2'-O-methylated nucleotides and a 45 sec coupling step for 2'-deoxy nucleotides or 2'-deoxy-2'-fluoro nucleotides. **Table II** outlines the amounts and the contact times of the reagents  
 30 used in the synthesis cycle. Alternatively, syntheses at the 0.2  $\mu$ mol scale can be performed on a 96-well plate synthesizer, such as the instrument produced by Protogene

(Palo Alto, CA) with minimal modification to the cycle. A 33-fold excess (60  $\mu\text{L}$  of 0.11 M = 6.6  $\mu\text{mol}$ ) of 2'-O-methyl phosphoramidite and a 105-fold excess of S-ethyl tetrazole (60  $\mu\text{L}$  of 0.25 M = 15  $\mu\text{mol}$ ) can be used in each coupling cycle of 2'-O-methyl residues relative to polymer-bound 5'-hydroxyl. A 22-fold excess (40  $\mu\text{L}$  of 0.11 M = 4.4  $\mu\text{mol}$ ) of deoxy phosphoramidite and a 70-fold excess of S-ethyl tetrazole (40  $\mu\text{L}$  of 0.25 M = 10  $\mu\text{mol}$ ) can be used in each coupling cycle of deoxy residues relative to polymer-bound 5'-hydroxyl. Average coupling yields on the 394 Applied Biosystems, Inc. synthesizer, determined by colorimetric quantitation of the trityl fractions, are typically 97.5-99%. Other oligonucleotide synthesis reagents for the 394 Applied Biosystems, Inc. synthesizer include the following: detritylation solution is 3% TCA in methylene chloride (ABI); capping is performed with 16% *N*-methyl imidazole in THF (ABI) and 10% acetic anhydride/10% 2,6-lutidine in THF (ABI); and oxidation solution is 16.9 mM  $\text{I}_2$ , 49 mM pyridine, 9% water in THF (PERSEPTIVE™). Burdick & Jackson Synthesis Grade acetonitrile is used directly from the reagent bottle. S-Ethyltetrazole solution (0.25 M in acetonitrile) is made up from the solid obtained from American International Chemical, Inc. Alternately, for the introduction of phosphorothioate linkages, Beaucage reagent (3H-1,2-Benzodithiol-3-one 1,1-dioxide, 0.05 M in acetonitrile) is used.

Deprotection of the DNA-based oligonucleotides is performed as follows: the polymer-bound trityl-on oligoribonucleotide is transferred to a 4 mL glass screw top vial and suspended in a solution of 40% aq. methylamine (1 mL) at 65 °C for 10 min. After cooling to -20 °C, the supernatant is removed from the polymer support. The support is washed three times with 1.0 mL of EtOH:MeCN:H<sub>2</sub>O/3:1:1, vortexed and the supernatant is then added to the first supernatant. The combined supernatants, containing the oligoribonucleotide, are dried to a white powder.

The method of synthesis used for RNA including certain siNA molecules of the invention follows the procedure as described in Usman *et al.*, 1987, *J. Am. Chem. Soc.*, 109, 7845; Scaringe *et al.*, 1990, *Nucleic Acids Res.*, 18, 5433; and Wincott *et al.*, 1995, *Nucleic Acids Res.* 23, 2677-2684 Wincott *et al.*, 1997, *Methods Mol. Bio.*, 74, 59, and makes use of common nucleic acid protecting and coupling groups, such as dimethoxytrityl at the 5'-end, and phosphoramidites at the 3'-end. In a non-limiting example, small scale syntheses are conducted on a 394 Applied Biosystems, Inc. synthesizer using a 0.2  $\mu\text{mol}$  scale protocol with a 7.5 min coupling step for alkylsilyl

protected nucleotides and a 2.5 min coupling step for 2'-O-methylated nucleotides. **Table II** outlines the amounts and the contact times of the reagents used in the synthesis cycle. Alternatively, syntheses at the 0.2  $\mu$ mol scale can be done on a 96-well plate synthesizer, such as the instrument produced by Protogene (Palo Alto, CA) with minimal modification to the cycle. A 33-fold excess (60  $\mu$ L of 0.11 M = 6.6  $\mu$ mol) of 2'-O-methyl phosphoramidite and a 75-fold excess of S-ethyl tetrazole (60  $\mu$ L of 0.25 M = 15  $\mu$ mol) can be used in each coupling cycle of 2'-O-methyl residues relative to polymer-bound 5'-hydroxyl. A 66-fold excess (120  $\mu$ L of 0.11 M = 13.2  $\mu$ mol) of alkylsilyl (ribo) protected phosphoramidite and a 150-fold excess of S-ethyl tetrazole (120  $\mu$ L of 0.25 M = 30  $\mu$ mol) can be used in each coupling cycle of ribo residues relative to polymer-bound 5'-hydroxyl. Average coupling yields on the 394 Applied Biosystems, Inc. synthesizer, determined by colorimetric quantitation of the trityl fractions, are typically 97.5-99%. Other oligonucleotide synthesis reagents for the 394 Applied Biosystems, Inc. synthesizer include the following: detritylation solution is 3% TCA in methylene chloride (ABI); capping is performed with 16% *N*-methyl imidazole in THF (ABI) and 10% acetic anhydride/10% 2,6-lutidine in THF (ABI); oxidation solution is 16.9 mM  $I_2$ , 49 mM pyridine, 9% water in THF (PERSEPTIVE™). Burdick & Jackson Synthesis Grade acetonitrile is used directly from the reagent bottle. S-Ethyltetrazole solution (0.25 M in acetonitrile) is made up from the solid obtained from American International Chemical, Inc. Alternately, for the introduction of phosphorothioate linkages, Beaucage reagent (3H-1,2-Benzodithiol-3-one 1,1-dioxide 0.05 M in acetonitrile) is used.

Deprotection of the RNA is performed using either a two-pot or one-pot protocol. For the two-pot protocol, the polymer-bound trityl-on oligoribonucleotide is transferred to a 4 mL glass screw top vial and suspended in a solution of 40% aq. methylamine (1 mL) at 65 °C for 10 min. After cooling to -20 °C, the supernatant is removed from the polymer support. The support is washed three times with 1.0 mL of EtOH:MeCN:H<sub>2</sub>O/3:1:1, vortexed and the supernatant is then added to the first supernatant. The combined supernatants, containing the oligoribonucleotide, are dried to a white powder. The base deprotected oligoribonucleotide is resuspended in anhydrous TEA/HF/NMP solution (300  $\mu$ L of a solution of 1.5 mL *N*-methylpyrrolidinone, 750  $\mu$ L TEA and 1 mL TEA•3HF to provide a 1.4 M HF concentration) and heated to 65 °C. After 1.5 h, the oligomer is quenched with 1.5 M NH<sub>4</sub>HCO<sub>3</sub>.

Alternatively, for the one-pot protocol, the polymer-bound trityl-on oligoribonucleotide is transferred to a 4 mL glass screw top vial and suspended in a solution of 33% ethanolic methylamine/DMSO: 1/1 (0.8 mL) at 65 °C for 15 min. The vial is brought to rt. TEA•3HF (0.1 mL) is added and the vial is heated at 65 °C for 15 min. The sample is cooled at -20 °C and then quenched with 1.5 M NH<sub>4</sub>HCO<sub>3</sub>.

For purification of the trityl-on oligomers, the quenched NH<sub>4</sub>HCO<sub>3</sub> solution is loaded onto a C-18 containing cartridge that had been prewashed with acetonitrile followed by 50 mM TEAA. After washing the loaded cartridge with water, the RNA is detritylated with 0.5% TFA for 13 min. The cartridge is then washed again with water, salt exchanged with 1 M NaCl and washed with water again. The oligonucleotide is then eluted with 30% acetonitrile.

The average stepwise coupling yields are typically >98% (Wincott *et al.*, 1995 *Nucleic Acids Res.* 23, 2677-2684). Those of ordinary skill in the art will recognize that the scale of synthesis can be adapted to be larger or smaller than the example described above including but not limited to 96-well format.

Alternatively, the nucleic acid molecules of the present invention can be synthesized separately and joined together post-synthetically, for example, by ligation (Moore *et al.*, 1992, *Science* 256, 9923; Draper *et al.*, International PCT publication No. WO 93/23569; Shabarova *et al.*, 1991, *Nucleic Acids Research* 19, 4247; Bellon *et al.*, 1997, *Nucleosides & Nucleotides*, 16, 951; Bellon *et al.*, 1997, *Bioconjugate Chem.* 8, 204), or by hybridization following synthesis and/or deprotection.

The siNA molecules of the invention can also be synthesized via a tandem synthesis methodology as described in Example 1 herein, wherein both siNA strands are synthesized as a single contiguous oligonucleotide fragment or strand separated by a cleavable linker which is subsequently cleaved to provide separate siNA fragments or strands that hybridize and permit purification of the siNA duplex. The linker can be a polynucleotide linker or a non-nucleotide linker. The tandem synthesis of siNA as described herein can be readily adapted to both multiwell/multiplate synthesis platforms such as 96 well or similarly larger multi-well platforms. The tandem synthesis of siNA as

described herein can also be readily adapted to large scale synthesis platforms employing batch reactors, synthesis columns and the like.

A siNA molecule can also be assembled from two distinct nucleic acid strands or fragments wherein one fragment includes the sense region and the second fragment  
5 includes the antisense region of the RNA molecule.

The nucleic acid molecules of the present invention can be modified extensively to enhance stability by modification with nuclease resistant groups, for example, 2'-amino, 2'-C-allyl, 2'-fluoro, 2'-O-methyl, 2'-H (for a review see Usman and Cedergren, 1992, *TIBS* 17, 34; Usman *et al.*, 1994, *Nucleic Acids Symp. Ser.* 31, 163). siNA constructs can  
10 be purified by gel electrophoresis using general methods or can be purified by high pressure liquid chromatography (HPLC; see Wincott *et al.*, *supra*, the totality of which is hereby incorporated herein by reference) and re-suspended in water.

In another aspect of the invention, siNA molecules of the invention are expressed from transcription units inserted into DNA or RNA vectors. The recombinant vectors can  
15 be DNA plasmids or viral vectors. siNA expressing viral vectors can be constructed based on, but not limited to, adeno-associated virus, retrovirus, adenovirus, or alphavirus. The recombinant vectors capable of expressing the siNA molecules can be delivered as described herein, and persist in target cells. Alternatively, viral vectors can be used that provide for transient expression of siNA molecules.

20 Optimizing Activity of the nucleic acid molecule of the invention.

Chemically synthesizing nucleic acid molecules with modifications (base, sugar and/or phosphate) can prevent their degradation by serum ribonucleases, which can increase their potency (see *e.g.*, Eckstein *et al.*, International Publication No. WO 92/07065; Perrault *et al.*, 1990 *Nature* 344, 565; Pieken *et al.*, 1991, *Science* 253, 314;  
25 Usman and Cedergren, 1992, *Trends in Biochem. Sci.* 17, 334; Usman *et al.*, International Publication No. WO 93/15187; and Rossi *et al.*, International Publication No. WO 91/03162; Sproat, U.S. Pat. No. 5,334,711; Gold *et al.*, U.S. Pat. No. 6,300,074; and Burgin *et al.*, *supra*; all of which are incorporated by reference herein). All of the above references describe various chemical modifications that can be made to the base,  
30 phosphate and/or sugar moieties of the nucleic acid molecules described herein.



Therefore, when designing nucleic acid molecules, the amount of these internucleotide linkages should be minimized. The reduction in the concentration of these linkages should lower toxicity, resulting in increased efficacy and higher specificity of these molecules.

5        Short interfering nucleic acid (siNA) molecules having chemical modifications that maintain or enhance activity are provided. Such a nucleic acid is also generally more resistant to nucleases than an unmodified nucleic acid. Accordingly, the *in vitro* and/or *in vivo* activity should not be significantly lowered. In cases in which modulation is the goal, therapeutic nucleic acid molecules delivered exogenously should optimally be stable  
10        within cells until translation of the target RNA has been modulated long enough to reduce the levels of the undesirable protein. This period of time varies between hours to days depending upon the disease state. Improvements in the chemical synthesis of RNA and DNA (Wincott *et al.*, 1995, *Nucleic Acids Res.* 23, 2677; Caruthers *et al.*, 1992, *Methods in Enzymology* 211,3-19 (incorporated by reference herein)) have expanded the ability to  
15        modify nucleic acid molecules by introducing nucleotide modifications to enhance their nuclease stability, as described above.

      In one embodiment, nucleic acid molecules of the invention include one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) G-clamp nucleotides. A G-clamp nucleotide is a modified cytosine analog wherein the modifications confer the ability to  
20        hydrogen bond both Watson-Crick and Hoogsteen faces of a complementary guanine within a duplex, see for example Lin and Matteucci, 1998, *J. Am. Chem. Soc.*, 120, 8531-8532. A single G-clamp analog substitution within an oligonucleotide can result in substantially enhanced helical thermal stability and mismatch discrimination when hybridized to complementary oligonucleotides. The inclusion of such nucleotides in  
25        nucleic acid molecules of the invention results in both enhanced affinity and specificity to nucleic acid targets, complementary sequences, or template strands. In another embodiment, nucleic acid molecules of the invention include one or more (*e.g.*, about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, or more) LNA "locked nucleic acid" nucleotides such as a 2', 4'-C methylene bicyclo nucleotide (see for example Wengel *et al.*, International PCT  
30        Publication No. WO 00/66604 and WO 99/14226).

In another embodiment, the invention features conjugates and/or complexes of siNA molecules of the invention. Such conjugates and/or complexes can be used to facilitate delivery of siNA molecules into a biological system, such as a cell. The conjugates and complexes provided by the instant invention can impart therapeutic activity by transferring therapeutic compounds across cellular membranes, altering the pharmacokinetics, and/or modulating the localization of nucleic acid molecules of the invention. The present invention encompasses the design and synthesis of novel conjugates and complexes for the delivery of molecules, including, but not limited to, small molecules, lipids, phospholipids, nucleosides, nucleotides, nucleic acids, antibodies, toxins, negatively charged polymers and other polymers, for example proteins, peptides, hormones, carbohydrates, polyethylene glycols, or polyamines, across cellular membranes. In general, the transporters described are designed to be used either individually or as part of a multi-component system, with or without degradable linkers. These compounds are expected to improve delivery and/or localization of nucleic acid molecules of the invention into a number of cell types originating from different tissues, in the presence or absence of serum (see Sullenger and Cech, U.S. Pat. No. 5,854,038). Conjugates of the molecules described herein can be attached to biologically active molecules via linkers that are biodegradable, such as biodegradable nucleic acid linker molecules.

The term "biodegradable linker" as used herein, refers to a nucleic acid or non-nucleic acid linker molecule that is designed as a biodegradable linker to connect one molecule to another molecule, for example, a biologically active molecule to a siNA molecule of the invention or the sense and antisense strands of a siNA molecule of the invention. The biodegradable linker is designed such that its stability can be modulated for a particular purpose, such as delivery to a particular tissue or cell type. The stability of a nucleic acid-based biodegradable linker molecule can be modulated by using various chemistries, for example combinations of ribonucleotides, deoxyribonucleotides, and chemically-modified nucleotides, such as 2'-O-methyl, 2'-fluoro, 2'-amino, 2'-O-amino, 2'-C-allyl, 2'-O-allyl, and other 2'-modified or base modified nucleotides. The biodegradable nucleic acid linker molecule can be a dimer, trimer, tetramer or longer nucleic acid molecule, for example, an oligonucleotide of about 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20 nucleotides in length, or can comprise a single

nucleotide with a phosphorus-based linkage, for example, a phosphoramidate or phosphodiester linkage. The biodegradable nucleic acid linker molecule can also comprise nucleic acid backbone, nucleic acid sugar, or nucleic acid base modifications.

5 The term "biodegradable" as used herein, refers to degradation in a biological system, for example enzymatic degradation or chemical degradation.

The term "biologically active molecule" as used herein, refers to compounds or molecules that are capable of eliciting or modifying a biological response in a system. Non-limiting examples of biologically active siNA molecules either alone or in combination with other molecules contemplated by the instant invention include  
10 therapeutically active molecules such as antibodies, hormones, antivirals, peptides, proteins, chemotherapeutics, small molecules, vitamins, co-factors, nucleosides, nucleotides, oligonucleotides, enzymatic nucleic acids, antisense nucleic acids, triplex forming oligonucleotides, 2,5-A chimeras, siNA, dsRNA, allozymes, aptamers, decoys and analogs thereof. Biologically active molecules of the invention also include  
15 molecules capable of modulating the pharmacokinetics and/or pharmacodynamics of other biologically active molecules, for example, lipids and polymers such as polyamines, polyamides, polyethylene glycol and other polyethers.

The term "phospholipid" as used herein, refers to a hydrophobic molecule comprising at least one phosphorus group. For example, a phospholipid can comprise a  
20 phosphorus-containing group and saturated or unsaturated alkyl group, optionally substituted with OH, COOH, oxo, amine, or substituted or unsubstituted aryl groups.

Therapeutic nucleic acid molecules (*e.g.*, siNA molecules) delivered exogenously optimally are stable within cells until reverse transcription of the RNA has been modulated long enough to reduce the levels of the RNA transcript. The nucleic acid  
25 molecules are resistant to nucleases in order to function as effective intracellular therapeutic agents. Improvements in the chemical synthesis of nucleic acid molecules described in the instant invention and in the art have expanded the ability to modify nucleic acid molecules by introducing nucleotide modifications to enhance their nuclease stability as described above.

In yet another embodiment, siNA molecules having chemical modifications that maintain or enhance enzymatic activity of proteins involved in RNAi are provided. Such nucleic acids are also generally more resistant to nucleases than unmodified nucleic acids. Thus, *in vitro* and/or *in vivo* the activity should not be significantly lowered.

5        Use of the nucleic acid-based molecules of the invention will lead to better treatment of the disease progression by affording the possibility of combination therapies (e.g., multiple siNA molecules targeted to different genes; nucleic acid molecules coupled with known small molecule modulators; or intermittent treatment with combinations of molecules, including different motifs and/or other chemical or biological molecules). The  
10        treatment of subjects with siNA molecules can also include combinations of different types of nucleic acid molecules, such as enzymatic nucleic acid molecules (ribozymes), allozymes, antisense, 2,5-A oligoadenylate, decoys, and aptamers.

15        In another aspect a siNA molecule of the invention comprises one or more 5' and/or a 3'- cap structure, for example on only the sense siNA strand, the antisense siNA strand, or both siNA strands.

By "cap structure" is meant chemical modifications, which have been incorporated at either terminus of the oligonucleotide (see, for example, Adamic *et al.*, U.S. Pat. No. 5,998,203, incorporated by reference herein). These terminal modifications protect the nucleic acid molecule from exonuclease degradation, and may help in delivery and/or  
20        localization within a cell. The cap may be present at the 5'-terminus (5'-cap) or at the 3'-terminal (3'-cap) or may be present on both termini. In non-limiting examples, the 5'-cap is selected from the group consisting of glyceryl, inverted deoxy abasic residue (moiety); 4',5'-methylene nucleotide; 1-(beta-D-erythrofuranosyl) nucleotide, 4'-thio nucleotide; carbocyclic nucleotide; 1,5-anhydrohexitol nucleotide; L-nucleotides; alpha-nucleotides;  
25        modified base nucleotide; phosphorodithioate linkage; *threo*-pentofuranosyl nucleotide; acyclic 3',4'-seco nucleotide; acyclic 3,4-dihydroxybutyl nucleotide; acyclic 3,5-dihydroxypentyl nucleotide, 3'-3'-inverted nucleotide moiety; 3'-3'-inverted abasic moiety; 3'-2'-inverted nucleotide moiety; 3'-2'-inverted abasic moiety; 1,4-butanediol phosphate; 3'-phosphoramidate; hexylphosphate; aminohexyl phosphate; 3'-phosphate; 3'-  
30        phosphorothioate; phosphorodithioate; or bridging or non-bridging methylphosphonate moiety.

In non-limiting examples, the 3'-cap is selected from the group consisting of glyceryl, inverted deoxy abasic residue (moiety), 4',5'-methylene nucleotide; 1-(beta-D-erythrofuransyl) nucleotide; 4'-thio nucleotide, carbocyclic nucleotide; 5'-amino-alkyl phosphate; 1,3-diamino-2-propyl phosphate; 3-aminopropyl phosphate; 6-aminoethyl phosphate; 1,2-aminododecyl phosphate; hydroxypropyl phosphate; 1,5-anhydrohexitol nucleotide; L-nucleotide; alpha-nucleotide; modified base nucleotide; phosphorodithioate; *threo*-pentofuransyl nucleotide; acyclic 3',4'-seco nucleotide; 3,4-dihydroxybutyl nucleotide; 3,5-dihydroxypentyl nucleotide, 5'-5'-inverted nucleotide moiety; 5'-5'-inverted abasic moiety; 5'-phosphoramidate; 5'-phosphorothioate; 1,4-butanediol phosphate; 5'-amino; bridging and/or non-bridging 5'-phosphoramidate, phosphorothioate and/or phosphorodithioate, bridging or non bridging methylphosphonate and 5'-mercapto moieties (for more details see Beaucage and Iyer, 1993, *Tetrahedron* 49, 1925; incorporated by reference herein).

By the term "non-nucleotide" is meant any group or compound which can be incorporated into a nucleic acid chain in the place of one or more nucleotide units, including either sugar and/or phosphate substitutions, and allows the remaining bases to exhibit their enzymatic activity. The group or compound is abasic in that it does not contain a commonly recognized nucleotide base, such as adenosine, guanine, cytosine, uracil or thymine and therefore lacks a base at the 1'-position.

An "alkyl" group refers to a saturated aliphatic hydrocarbon, including straight-chain, branched-chain, and cyclic alkyl groups. Preferably, the alkyl group has 1 to 12 carbons. More preferably, it is a lower alkyl of from 1 to 7 carbons, more preferably 1 to 4 carbons. The alkyl group can be substituted or unsubstituted. When substituted the substituted group(s) is preferably, hydroxyl, cyano, alkoxy, =O, =S, NO<sub>2</sub> or N(CH<sub>3</sub>)<sub>2</sub>, amino, or SH. The term also includes alkenyl groups that are unsaturated hydrocarbon groups containing at least one carbon-carbon double bond, including straight-chain, branched-chain, and cyclic groups. Preferably, the alkenyl group has 1 to 12 carbons. More preferably, it is a lower alkenyl of from 1 to 7 carbons, more preferably 1 to 4 carbons. The alkenyl group may be substituted or unsubstituted. When substituted the substituted group(s) is preferably, hydroxyl, cyano, alkoxy, =O, =S, NO<sub>2</sub>, halogen, N(CH<sub>3</sub>)<sub>2</sub>, amino, or SH. The term "alkyl" also includes alkynyl groups that have an

unsaturated hydrocarbon group containing at least one carbon-carbon triple bond, including straight-chain, branched-chain, and cyclic groups. Preferably, the alkynyl group has 1 to 12 carbons. More preferably, it is a lower alkynyl of from 1 to 7 carbons, more preferably 1 to 4 carbons. The alkynyl group may be substituted or unsubstituted.

- 5 When substituted the substituted group(s) is preferably, hydroxyl, cyano, alkoxy, =O, =S, NO<sub>2</sub> or N(CH<sub>3</sub>)<sub>2</sub>, amino or SH.

Such alkyl groups can also include aryl, alkylaryl, carbocyclic aryl, heterocyclic aryl, amide and ester groups. An "aryl" group refers to an aromatic group that has at least one ring having a conjugated pi electron system and includes carbocyclic aryl, 10 heterocyclic aryl and biaryl groups, all of which may be optionally substituted. The preferred substituent(s) of aryl groups are halogen, trihalomethyl, hydroxyl, SH, OH, cyano, alkoxy, alkyl, alkenyl, alkynyl, and amino groups. An "alkylaryl" group refers to an alkyl group (as described above) covalently joined to an aryl group (as described above). Carbocyclic aryl groups are groups wherein the ring atoms on the aromatic ring 15 are all carbon atoms. The carbon atoms are optionally substituted. Heterocyclic aryl groups are groups having from 1 to 3 heteroatoms as ring atoms in the aromatic ring and the remainder of the ring atoms are carbon atoms. Suitable heteroatoms include oxygen, sulfur, and nitrogen, and include furanyl, thienyl, pyridyl, pyrrolyl, N-lower alkyl pyrrolo, pyrimidyl, pyrazinyl, imidazolyl and the like, all optionally substituted. An "amide" 20 refers to an -C(O)-NH-R, where R is either alkyl, aryl, alkylaryl or hydrogen. An "ester" refers to an -C(O)-OR', where R is either alkyl, aryl, alkylaryl or hydrogen.

By "nucleotide" as used herein is as recognized in the art to include natural bases (standard), and modified bases well known in the art. Such bases are generally located at the 1' position of a nucleotide sugar moiety. Nucleotides generally comprise a base, sugar 25 and a phosphate group. The nucleotides can be unmodified or modified at the sugar, phosphate and/or base moiety, (also referred to interchangeably as nucleotide analogs, modified nucleotides, non-natural nucleotides, non-standard nucleotides and other; see, for example, Usman and McSwiggen, *supra*; Eckstein *et al.*, International PCT Publication No. WO 92/07065; Usman *et al.*, International PCT Publication No. WO 30 93/15187; Uhlman & Peyman, *supra*, all are hereby incorporated by reference herein). There are several examples of modified nucleic acid bases known in the art as summarized by Limbach *et al.*, 1994, *Nucleic Acids Res.* 22, 2183. Some of the non-

limiting examples of base modifications that can be introduced into nucleic acid molecules include, inosine, purine, pyridin-4-one, pyridin-2-one, phenyl, pseudouracil, 2, 4, 6-trimethoxy benzene, 3-methyl uracil, dihydrouridine, naphthyl, aminophenyl, 5-alkylcytidines (e.g., 5-methylcytidine), 5-alkyluridines (e.g., ribothymidine), 5-halouridine (e.g., 5-bromouridine) or 6-azapyrimidines or 6-alkylpyrimidines (e.g. 6-methyluridine), propyne, and others (Burgin *et al.*, 1996, *Biochemistry*, 35, 14090; Uhlman & Peyman, *supra*). By "modified bases" in this aspect is meant nucleotide bases other than adenine, guanine, cytosine and uracil at 1' position or their equivalents.

In one embodiment, the invention features modified siNA molecules, with phosphate backbone modifications comprising one or more phosphorothioate, phosphorodithioate, methylphosphonate, phosphotriester, morpholino, amidate carbamate, carboxymethyl, acetamidate, polyamide, sulfonate, sulfonamide, sulfamate, formacetal, thioformacetal, and/or alkylsilyl, substitutions. For a review of oligonucleotide backbone modifications, see Hunziker and Leumann, 1995, *Nucleic Acid Analogues: Synthesis and Properties*, in *Modern Synthetic Methods*, VCH, 331-417, and Mesmaeker *et al.*, 1994, *Novel Backbone Replacements for Oligonucleotides*, in *Carbohydrate Modifications in Antisense Research*, ACS, 24-39.

By "abasic" is meant sugar moieties lacking a base or having other chemical groups in place of a base at the 1' position, see for example Adamic *et al.*, U.S. Pat. No. 5,998,203.

By "unmodified nucleoside" is meant one of the bases adenine, cytosine, guanine, thymine, or uracil joined to the 1' carbon of  $\beta$ -D-ribo-furanose.

By "modified nucleoside" is meant any nucleotide base which contains a modification in the chemical structure of an unmodified nucleotide base, sugar and/or phosphate. Non-limiting examples of modified nucleotides are shown by Formulae I-VII and/or other modifications described herein.

In connection with 2'-modified nucleotides as described for the present invention, by "amino" is meant 2'-NH<sub>2</sub> or 2'-O- NH<sub>2</sub>, which can be modified or unmodified. Such modified groups are described, for example, in Eckstein *et al.*, U.S. Pat. No. 5,672,695

and Matulic-Adamic *et al.*, U.S. Pat. No. 6,248,878, which are both incorporated by reference in their entireties.

Various modifications to nucleic acid siNA structure can be made to enhance the utility of these molecules. Such modifications will enhance shelf-life, half-life *in vitro*,  
5 stability, and ease of introduction of such oligonucleotides to the target site, *e.g.*, to enhance penetration of cellular membranes, and confer the ability to recognize and bind to targeted cells.

#### Administration of Nucleic Acid Molecules

A siNA molecule of the invention can be adapted for use to treat any disease,  
10 infection or condition associated with gene expression, and other indications that can respond to the level of gene product in a cell or tissue, alone or in combination with other therapies. For example, a siNA molecule can comprise a delivery vehicle, including liposomes, for administration to a subject, carriers and diluents and their salts, and/or can be present in pharmaceutically acceptable formulations. Methods for the delivery of  
15 nucleic acid molecules are described in Akhtar *et al.*, 1992, *Trends Cell Bio.*, 2, 139; *Delivery Strategies for Antisense Oligonucleotide Therapeutics*, ed. Akhtar, 1995, Maurer *et al.*, 1999, *Mol. Membr. Biol.*, 16, 129-140; Hofland and Huang, 1999, *Handb. Exp. Pharmacol.*, 137, 165-192; and Lee *et al.*, 2000, *ACS Symp. Ser.*, 752, 184-192, all of which are incorporated herein by reference. Beigelman *et al.*, U.S. Pat. No. 6,395,713  
20 and Sullivan *et al.*, PCT WO 94/02595 further describe the general methods for delivery of nucleic acid molecules. These protocols can be utilized for the delivery of virtually any nucleic acid molecule. Nucleic acid molecules can be administered to cells by a variety of methods known to those of skill in the art, including, but not restricted to, encapsulation in liposomes, by iontophoresis, or by incorporation into other vehicles,  
25 such as hydrogels, cyclodextrins (see for example Gonzalez *et al.*, 1999, *Bioconjugate Chem.*, 10, 1068-1074), biodegradable nanocapsules, and bioadhesive microspheres, or by proteinaceous vectors (O'Hare and Normand, International PCT Publication No. WO 00/53722). Alternatively, the nucleic acid/vehicle combination is locally delivered by direct injection or by use of an infusion pump. Direct injection of the nucleic acid  
30 molecules of the invention, whether subcutaneous, intramuscular, or intradermal, can take place using standard needle and syringe methodologies, or by needle-free technologies



such as those described in Conry *et al.*, 1999, *Clin. Cancer Res.*, 5, 2330-2337 and Barry *et al.*, International PCT Publication No. WO 99/31262. Many examples in the art describe CNS delivery methods of oligonucleotides by osmotic pump, (see Chun *et al.*, 1998, *Neuroscience Letters*, 257, 135-138, D'Aldin *et al.*, 1998, *Mol. Brain Research*, 55, 151-164, Dryden *et al.*, 1998, *J. Endocrinol.*, 157, 169-175, Ghimikar *et al.*, 1998, *Neuroscience Letters*, 247, 21-24) or direct infusion (Broaddus *et al.*, 1997, *Neurosurg. Focus*, 3, article 4). Other routes of delivery include, but are not limited to oral (tablet or pill form) and/or intrathecal delivery (Gold, 1997, *Neuroscience*, 76, 1153-1158). More detailed descriptions of nucleic acid delivery and administration are provided in Sullivan *et al.*, supra, Draper *et al.*, PCT WO93/23569, Beigelman *et al.*, PCT WO99/05094, and Klimuk *et al.*, PCT WO99/04819 all of which have been incorporated by reference herein. The molecules of the instant invention can be used as pharmaceutical agents. Pharmaceutical agents prevent, modulate the occurrence, or treat (alleviate a symptom to some extent, preferably all of the symptoms) of a disease state in a subject.

In addition, the invention features the use of methods to deliver the nucleic acid molecules of the instant invention to hematopoietic cells, including monocytes and lymphocytes. These methods are described in detail by Hartmann *et al.*, 1998, *J. Pharmacol. Exp. Ther.*, 285(2), 920-928; Kronenwett *et al.*, 1998, *Blood*, 91(3), 852-862; Filion and Phillips, 1997, *Biochim. Biophys. Acta.*, 1329(2), 345-356; Ma and Wei, 1996, *Leuk. Res.*, 20(11/12), 925-930; and Bongartz *et al.*, 1994, *Nucleic Acids Research*, 22(22), 4681-8. Such methods, as described above, include the use of free oligonucleotide, cationic lipid formulations, liposome formulations including pH sensitive liposomes and immunoliposomes, and bioconjugates including oligonucleotides conjugated to fusogenic peptides, for the transfection of hematopoietic cells with oligonucleotides.

Thus, the invention features a pharmaceutical composition comprising one or more nucleic acid(s) of the invention in an acceptable carrier, such as a stabilizer, buffer, and the like. The polynucleotides of the invention can be administered (*e.g.*, RNA, DNA or protein) and introduced into a subject by any standard means, with or without stabilizers, buffers, and the like, to form a pharmaceutical composition. When it is desired to use a liposome delivery mechanism, standard protocols for formation of liposomes can be followed. The compositions of the present invention can also be formulated and used as

tablets, capsules or elixirs for oral administration, suppositories for rectal administration, sterile solutions, suspensions for injectable administration, and the other compositions known in the art.

5 The present invention also includes pharmaceutically acceptable formulations of the compounds described. These formulations include salts of the above compounds, *e.g.*, acid addition salts, for example, salts of hydrochloric, hydrobromic, acetic acid, and benzene sulfonic acid.

10 A pharmacological composition or formulation refers to a composition or formulation in a form suitable for administration, *e.g.*, systemic administration, into a cell or subject, including for example a human. Suitable forms, in part, depend upon the use or the route of entry, for example oral, transdermal, or by injection. Such forms should not prevent the composition or formulation from reaching a target cell (*i.e.*, a cell to which the negatively charged nucleic acid is desirable for delivery). For example, pharmacological compositions injected into the blood stream should be soluble. Other  
15 factors are known in the art, and include considerations such as toxicity and forms that prevent the composition or formulation from exerting its effect.

By "systemic administration" is meant *in vivo* systemic absorption or accumulation of drugs in the blood stream followed by distribution throughout the entire body. Administration routes that lead to systemic absorption include, without limitation:  
20 intravenous, subcutaneous, intraperitoneal, inhalation, oral, intrapulmonary and intramuscular. Each of these administration routes exposes the siNA molecules of the invention to an accessible diseased tissue. The rate of entry of a drug into the circulation has been shown to be a function of molecular weight or size. The use of a liposome or other drug carrier comprising the compounds of the instant invention can potentially  
25 localize the drug, for example, in certain tissue types, such as the tissues of the reticular endothelial system (RES). A liposome formulation that can facilitate the association of drug with the surface of cells, such as, lymphocytes and macrophages is also useful. This approach can provide enhanced delivery of the drug to target cells by taking advantage of the specificity of macrophage and lymphocyte immune recognition of abnormal cells,  
30 such as cells producing excess MDR.

By "pharmaceutically acceptable formulation" is meant, a composition or formulation that allows for the effective distribution of the nucleic acid molecules of the instant invention in the physical location most suitable for their desired activity. Non-limiting examples of agents suitable for formulation with the nucleic acid molecules of the instant invention include: P-glycoprotein inhibitors (such as Pluronic P85), which can enhance entry of drugs into the CNS (Jolliet-Riant and Tillement, 1999, *Fundam. Clin. Pharmacol.*, 13, 16-26); biodegradable polymers, such as poly (DL-lactide-coglycolide) microspheres for sustained release delivery after intracerebral implantation (Emerich, DF *et al.*, 1999, *Cell Transplant*, 8, 47-58) (Alkermes, Inc. Cambridge, MA); and loaded nanoparticles, such as those made of polybutylcyanoacrylate, which can deliver drugs across the blood brain barrier and can alter neuronal uptake mechanisms (*Prog Neuropsychopharmacol Biol Psychiatry*, 23, 941-949, 1999). Other non-limiting examples of delivery strategies for the nucleic acid molecules of the instant invention include material described in Boado *et al.*, 1998, *J. Pharm. Sci.*, 87, 1308-1315; Tyler *et al.*, 1999, *FEBS Lett.*, 421, 280-284; Pardridge *et al.*, 1995, *PNAS USA.*, 92, 5592-5596; Boado, 1995, *Adv. Drug Delivery Rev.*, 15, 73-107; Aldrian-Herrada *et al.*, 1998, *Nucleic Acids Res.*, 26, 4910-4916; and Tyler *et al.*, 1999, *PNAS USA.*, 96, 7053-7058.

The invention also features the use of the composition comprising surface-modified liposomes containing poly (ethylene glycol) lipids (PEG-modified, or long-circulating liposomes or stealth liposomes). These formulations offer a method for increasing the accumulation of drugs in target tissues. This class of drug carriers resists opsonization and elimination by the mononuclear phagocytic system (MPS or RES), thereby enabling longer blood circulation times and enhanced tissue exposure for the encapsulated drug (Lasic *et al. Chem. Rev.* 1995, 95, 2601-2627; Ishiwata *et al.*, *Chem. Pharm. Bull.* 1995, 43, 1005-1011). Such liposomes have been shown to accumulate selectively in tumors, presumably by extravasation and capture in the neovascularized target tissues (Lasic *et al.*, *Science* 1995, 267, 1275-1276; Oku *et al.*, 1995, *Biochim. Biophys. Acta*, 1238, 86-90). The long-circulating liposomes enhance the pharmacokinetics and pharmacodynamics of DNA and RNA, particularly compared to conventional cationic liposomes which are known to accumulate in tissues of the MPS (Liu *et al.*, *J. Biol. Chem.* 1995, 42, 24864-24870; Choi *et al.*, International PCT Publication No. WO 96/10391; Ansell *et al.*, International PCT Publication No. WO 96/10390; Holland *et al.*,

International PCT Publication No. WO 96/10392). Long-circulating liposomes are also likely to protect drugs from nuclease degradation to a greater extent compared to cationic liposomes, based on their ability to avoid accumulation in metabolically aggressive MPS tissues such as the liver and spleen.

5       The present invention also includes compositions prepared for storage or administration that include a pharmaceutically effective amount of the desired compounds in a pharmaceutically acceptable carrier or diluent. Acceptable carriers or diluents for therapeutic use are well known in the pharmaceutical art, and are described, for example, in *Remington's Pharmaceutical Sciences*, Mack Publishing Co. (A.R. Gennaro edit.  
10 1985), hereby incorporated by reference herein. For example, preservatives, stabilizers, dyes and flavoring agents can be provided. These include sodium benzoate, sorbic acid and esters of *p*-hydroxybenzoic acid. In addition, antioxidants and suspending agents can be used.

A pharmaceutically effective dose is that dose required to prevent, inhibit the  
15 occurrence, or treat (alleviate a symptom to some extent, preferably all of the symptoms) of a disease state. The pharmaceutically effective dose depends on the type of disease, the composition used, the route of administration, the type of mammal being treated, the physical characteristics of the specific mammal under consideration, concurrent medication, and other factors that those skilled in the medical arts will recognize.  
20 Generally, an amount between 0.1 mg/kg and 100 mg/kg body weight/day of active ingredients is administered dependent upon potency of the negatively charged polymer.

The nucleic acid molecules of the invention and formulations thereof can be administered orally, topically, parenterally, by inhalation or spray, or rectally in dosage unit formulations containing conventional non-toxic pharmaceutically acceptable carriers,  
25 adjuvants and/or vehicles. The term parenteral as used herein includes percutaneous, subcutaneous, intravascular (e.g., intravenous), intramuscular, or intrathecal injection or infusion techniques and the like. In addition, there is provided a pharmaceutical formulation comprising a nucleic acid molecule of the invention and a pharmaceutically acceptable carrier. One or more nucleic acid molecules of the invention can be present in  
30 association with one or more non-toxic pharmaceutically acceptable carriers and/or diluents and/or adjuvants, and if desired other active ingredients. The pharmaceutical

compositions containing nucleic acid molecules of the invention can be in a form suitable for oral use, for example, as tablets, troches, lozenges, aqueous or oily suspensions, dispersible powders or granules, emulsion, hard or soft capsules, or syrups or elixirs.

Compositions intended for oral use can be prepared according to any method known to the art for the manufacture of pharmaceutical compositions and such compositions can contain one or more such sweetening agents, flavoring agents, coloring agents or preservative agents in order to provide pharmaceutically elegant and palatable preparations. Tablets contain the active ingredient in admixture with non-toxic pharmaceutically acceptable excipients that are suitable for the manufacture of tablets. These excipients can be, for example, inert diluents; such as calcium carbonate, sodium carbonate, lactose, calcium phosphate or sodium phosphate; granulating and disintegrating agents, for example, corn starch, or alginic acid; binding agents, for example starch, gelatin or acacia; and lubricating agents, for example magnesium stearate, stearic acid or talc. The tablets can be uncoated or they can be coated by known techniques. In some cases such coatings can be prepared by known techniques to delay disintegration and absorption in the gastrointestinal tract and thereby provide a sustained action over a longer period. For example, a time delay material such as glyceryl monostearate or glyceryl distearate can be employed.

Formulations for oral use can also be presented as hard gelatin capsules wherein the active ingredient is mixed with an inert solid diluent, for example, calcium carbonate, calcium phosphate or kaolin, or as soft gelatin capsules wherein the active ingredient is mixed with water or an oil medium, for example peanut oil, liquid paraffin or olive oil.

Aqueous suspensions contain the active materials in a mixture with excipients suitable for the manufacture of aqueous suspensions. Such excipients are suspending agents, for example sodium carboxymethylcellulose, methylcellulose, hydropropylmethylcellulose, sodium alginate, polyvinylpyrrolidone, gum tragacanth and gum acacia; dispersing or wetting agents can be a naturally-occurring phosphatide, for example, lecithin, or condensation products of an alkylene oxide with fatty acids, for example polyoxyethylene stearate, or condensation products of ethylene oxide with long chain aliphatic alcohols, for example heptadecaethyleneoxycetanol, or condensation products of ethylene oxide with partial esters derived from fatty acids and a hexitol such as

polyoxyethylene sorbitol monooleate, or condensation products of ethylene oxide with partial esters derived from fatty acids and hexitol anhydrides, for example polyethylene sorbitan monooleate. The aqueous suspensions can also contain one or more preservatives, for example ethyl, or n-propyl p-hydroxybenzoate, one or more coloring  
5 agents, one or more flavoring agents, and one or more sweetening agents, such as sucrose or saccharin.

Oily suspensions can be formulated by suspending the active ingredients in a vegetable oil, for example arachis oil, olive oil, sesame oil or coconut oil, or in a mineral oil such as liquid paraffin. The oily suspensions can contain a thickening agent, for  
10 example beeswax, hard paraffin or cetyl alcohol. Sweetening agents and flavoring agents can be added to provide palatable oral preparations. These compositions can be preserved by the addition of an anti-oxidant such as ascorbic acid

Dispersible powders and granules suitable for preparation of an aqueous suspension by the addition of water provide the active ingredient in admixture with a dispersing or  
15 wetting agent, suspending agent and one or more preservatives. Suitable dispersing or wetting agents or suspending agents are exemplified by those already mentioned above. Additional excipients, for example sweetening, flavoring and coloring agents, can also be present.

Pharmaceutical compositions of the invention can also be in the form of oil-in-  
20 water emulsions. The oily phase can be a vegetable oil or a mineral oil or mixtures of these. Suitable emulsifying agents can be naturally-occurring gums, for example gum acacia or gum tragacanth, naturally-occurring phosphatides, for example soy bean, lecithin, and esters or partial esters derived from fatty acids and hexitol, anhydrides, for example sorbitan monooleate, and condensation products of the said partial esters with  
25 ethylene oxide, for example polyoxyethylene sorbitan monooleate. The emulsions can also contain sweetening and flavoring agents.

Syrups and elixirs can be formulated with sweetening agents, for example glycerol, propylene glycol, sorbitol, glucose or sucrose. Such formulations can also contain a demulcent, a preservative and flavoring and coloring agents. The pharmaceutical  
30 compositions can be in the form of a sterile injectable aqueous or oleaginous suspension. This suspension can be formulated according to the known art using those suitable

dispersing or wetting agents and suspending agents that have been mentioned above. The sterile injectable preparation can also be a sterile injectable solution or suspension in a non-toxic parentally acceptable diluent or solvent, for example as a solution in 1,3-butanediol. Among the acceptable vehicles and solvents that can be employed are water, Ringer's solution and isotonic sodium chloride solution. In addition, sterile, fixed oils are conventionally employed as a solvent or suspending medium. For this purpose, any bland fixed oil can be employed including synthetic mono-or diglycerides. In addition, fatty acids such as oleic acid find use in the preparation of injectables.

The nucleic acid molecules of the invention can also be administered in the form of suppositories, *e.g.*, for rectal administration of the drug. These compositions can be prepared by mixing the drug with a suitable non-irritating excipient that is solid at ordinary temperatures but liquid at the rectal temperature and will therefore melt in the rectum to release the drug. Such materials include cocoa butter and polyethylene glycols.

Nucleic acid molecules of the invention can be administered parenterally in a sterile medium. The drug, depending on the vehicle and concentration used, can either be suspended or dissolved in the vehicle. Advantageously, adjuvants such as local anesthetics, preservatives and buffering agents can be dissolved in the vehicle.

Dosage levels of the order of from about 0.1 mg to about 140 mg per kilogram of body weight per day are useful in the treatment of the above-indicated conditions (about 0.5 mg to about 7 g per subject per day). The amount of active ingredient that can be combined with the carrier materials to produce a single dosage form varies depending upon the host treated and the particular mode of administration. Dosage unit forms generally contain between from about 1 mg to about 500 mg of an active ingredient.

It is understood that the specific dose level for any particular subject depends upon a variety of factors including the activity of the specific compound employed, the age, body weight, general health, sex, diet, time of administration, route of administration, and rate of excretion, drug combination and the severity of the particular disease undergoing therapy.

For administration to non-human animals, the composition can also be added to the animal feed or drinking water. It can be convenient to formulate the animal feed and

drinking water compositions so that the animal takes in a therapeutically appropriate quantity of the composition along with its diet. It can also be convenient to present the composition as a premix for addition to the feed or drinking water.

5 The nucleic acid molecules of the present invention can also be administered to a subject in combination with other therapeutic compounds to increase the overall therapeutic effect. The use of multiple compounds to treat an indication can increase the beneficial effects while reducing the presence of side effects.

In one embodiment, the invention comprises compositions suitable for administering nucleic acid molecules of the invention to specific cell types. For example, 10 the asialoglycoprotein receptor (ASGPr) (Wu and Wu, 1987, *J. Biol. Chem.* 262, 4429-4432) is unique to hepatocytes and binds branched galactose-terminal glycoproteins, such as asialoorosomucoid (ASOR). In another example, the folate receptor is overexpressed in many cancer cells. Binding of such glycoproteins, synthetic glycoconjugates, or folates to the receptor takes place with an affinity that strongly depends on the degree of 15 branching of the oligosaccharide chain, for example, triantennary structures are bound with greater affinity than biantennary or monoantennary chains (Baenziger and Fiete, 1980, *Cell*, 22, 611-620; Connolly *et al.*, 1982, *J. Biol. Chem.*, 257, 939-945). Lee and Lee, 1987, *Glycoconjugate J.*, 4, 317-328, obtained this high specificity through the use of N-acetyl-D-galactosamine as the carbohydrate moiety, which has higher affinity for the receptor, 20 compared to galactose. This "clustering effect" has also been described for the binding and uptake of mannosyl-terminating glycoproteins or glycoconjugates (Ponpipom *et al.*, 1981, *J. Med. Chem.*, 24, 1388-1395). The use of galactose, galactosamine, or folate based conjugates to transport exogenous compounds across cell membranes can provide a targeted delivery approach to, for example, the treatment of liver disease, cancers of the 25 liver, or other cancers. The use of bioconjugates can also provide a reduction in the required dose of therapeutic compounds required for treatment. Furthermore, therapeutic bioavailability, pharmacodynamics, and pharmacokinetic parameters can be modulated through the use of nucleic acid bioconjugates of the invention. Non-limiting examples of such bioconjugates are described in Vargeese *et al.*, USSN 10/201,394, filed August 13, 30 2001; and Matulic-Adamic *et al.*, USSN 60/362,016, filed March 6, 2002.



Alternatively, certain siNA molecules of the instant invention can be expressed within cells from eukaryotic promoters (e.g., Izant and Weintraub, 1985, *Science*, 229, 345; McGarry and Lindquist, 1986, *Proc. Natl. Acad. Sci.*, USA 83, 399; Scanlon *et al.*, 1991, *Proc. Natl. Acad. Sci. USA*, 88, 10591-5; Kashani-Sabet *et al.*, 1992, *Antisense Res. Dev.*, 2, 3-15; Dropulic *et al.*, 1992, *J. Virol.*, 66, 1432-41; Weerasinghe *et al.*, 1991, *J. Virol.*, 65, 5531-4; Ojwang *et al.*, 1992, *Proc. Natl. Acad. Sci. USA*, 89, 10802-6; Chen *et al.*, 1992, *Nucleic Acids Res.*, 20, 4581-9; Sarver *et al.*, 1990 *Science*, 247, 1222-1225; Thompson *et al.*, 1995, *Nucleic Acids Res.*, 23, 2259; Good *et al.*, 1997, *Gene Therapy*, 4, 45. Those skilled in the art realize that any nucleic acid can be expressed in eukaryotic cells from the appropriate DNA/RNA vector. The activity of such nucleic acids can be augmented by their release from the primary transcript by a enzymatic nucleic acid (Draper *et al.*, PCT WO 93/23569, and Sullivan *et al.*, PCT WO 94/02595; Ohkawa *et al.*, 1992, *Nucleic Acids Symp. Ser.*, 27, 15-6; Taira *et al.*, 1991, *Nucleic Acids Res.*, 19, 5125-30; Ventura *et al.*, 1993, *Nucleic Acids Res.*, 21, 3249-55; Chowrira *et al.*, 1994, *J. Biol. Chem.*, 269, 25856.

In another aspect of the invention, RNA molecules of the present invention can be expressed from transcription units (see for example Couture *et al.*, 1996, *TIG.*, 12, 510) inserted into DNA or RNA vectors. The recombinant vectors can be DNA plasmids or viral vectors. siNA expressing viral vectors can be constructed based on, but not limited to, adeno-associated virus, retrovirus, adenovirus, or alphavirus. In another embodiment, pol III based constructs are used to express nucleic acid molecules of the invention (see for example Thompson, U.S. Pats. Nos. 5,902,880 and 6,146,886). The recombinant vectors capable of expressing the siNA molecules can be delivered as described above, and persist in target cells. Alternatively, viral vectors can be used that provide for transient expression of nucleic acid molecules. Such vectors can be repeatedly administered as necessary. Once expressed, the siNA molecule interacts with the target mRNA and generates an RNAi response. Delivery of siNA molecule expressing vectors can be systemic, such as by intravenous or intra-muscular administration, by administration to target cells ex-planted from a subject followed by reintroduction into the subject, or by any other means that would allow for introduction into the desired target cell (for a review see Couture *et al.*, 1996, *TIG.*, 12, 510).

In one aspect the invention features an expression vector comprising a nucleic acid sequence encoding at least one siNA molecule of the instant invention. The expression vector can encode one or both strands of a siNA duplex, or a single self-complementary strand that self hybridizes into a siNA duplex. The nucleic acid sequences encoding the siNA molecules of the instant invention can be operably linked in a manner that allows expression of the siNA molecule (see for example Paul *et al.*, 2002, *Nature Biotechnology*, 19, 505; Miyagishi and Taira, 2002, *Nature Biotechnology*, 19, 497; Lee *et al.*, 2002, *Nature Biotechnology*, 19, 500; and Novina *et al.*, 2002, *Nature Medicine*, advance online publication doi:10.1038/nm725).

In another aspect, the invention features an expression vector comprising: a) a transcription initiation region (*e.g.*, eukaryotic pol I, II or III initiation region); b) a transcription termination region (*e.g.*, eukaryotic pol I, II or III termination region); and c) a nucleic acid sequence encoding at least one of the siNA molecules of the instant invention; wherein said sequence is operably linked to said initiation region and said termination region, in a manner that allows expression and/or delivery of the siNA molecule. The vector can optionally include an open reading frame (ORF) for a protein operably linked on the 5' side or the 3'-side of the sequence encoding the siNA of the invention; and/or an intron (intervening sequences).

Transcription of the siNA molecule sequences can be driven from a promoter for eukaryotic RNA polymerase I (pol I), RNA polymerase II (pol II), or RNA polymerase III (pol III). Transcripts from pol II or pol III promoters are expressed at high levels in all cells; the levels of a given pol II promoter in a given cell type depends on the nature of the gene regulatory sequences (enhancers, silencers, etc.) present nearby. Prokaryotic RNA polymerase promoters are also used, providing that the prokaryotic RNA polymerase enzyme is expressed in the appropriate cells (Elroy-Stein and Moss, 1990, *Proc. Natl. Acad. Sci. U S A*, 87, 6743-7; Gao and Huang 1993, *Nucleic Acids Res.*, 21, 2867-72; Lieber *et al.*, 1993, *Methods Enzymol.*, 217, 47-66; Zhou *et al.*, 1990, *Mol. Cell. Biol.*, 10, 4529-37). Several investigators have demonstrated that nucleic acid molecules expressed from such promoters can function in mammalian cells (*e.g.* Kashani-Sabet *et al.*, 1992, *Antisense Res. Dev.*, 2, 3-15; Ojwang *et al.*, 1992, *Proc. Natl. Acad. Sci. U S A*, 89, 10802-6; Chen *et al.*, 1992, *Nucleic Acids Res.*, 20, 4581-9; Yu *et al.*, 1993, *Proc. Natl. Acad. Sci. U S A*, 90, 6340-4; L'Huillier *et al.*, 1992, *EMBO J.*, 11,

4411-8; Lisziewicz *et al.*, 1993, *Proc. Natl. Acad. Sci. U. S. A.*, 90, 8000-4; Thompson *et al.*, 1995, *Nucleic Acids Res.*, 23, 2259; Sullenger & Cech, 1993, *Science*, 262, 1566). More specifically, transcription units such as the ones derived from genes encoding U6 small nuclear (snRNA), transfer RNA (tRNA) and adenovirus VA RNA are useful in  
5 generating high concentrations of desired RNA molecules such as siNA in cells (Thompson *et al.*, *supra*; Couture and Stinchcomb, 1996, *supra*; Noonberg *et al.*, 1994, *Nucleic Acid Res.*, 22, 2830; Noonberg *et al.*, U.S. Pat. No. 5,624,803; Good *et al.*, 1997, *Gene Ther.*, 4, 45; Beigelman *et al.*, International PCT Publication No. WO 96/18736. The above siNA transcription units can be incorporated into a variety of vectors for  
10 introduction into mammalian cells, including but not restricted to, plasmid DNA vectors, viral DNA vectors (such as adenovirus or adeno-associated virus vectors), or viral RNA vectors (such as retroviral or alphavirus vectors) (for a review see Couture and Stinchcomb, 1996, *supra*).

In another aspect the invention features an expression vector comprising a nucleic  
15 acid sequence encoding at least one of the siNA molecules of the invention in a manner that allows expression of that siNA molecule. The expression vector comprises in one embodiment; a) a transcription initiation region; b) a transcription termination region; and c) a nucleic acid sequence encoding at least one strand of the siNA molecule, wherein the sequence is operably linked to the initiation region and the termination region in a manner  
20 that allows expression and/or delivery of the siNA molecule.

In another embodiment the expression vector comprises: a) a transcription initiation region; b) a transcription termination region; c) an open reading frame; and d) a nucleic acid sequence encoding at least one strand of a siNA molecule, wherein the sequence is operably linked to the 3'-end of the open reading frame and wherein the sequence is  
25 operably linked to the initiation region, the open reading frame and the termination region in a manner that allows expression and/or delivery of the siNA molecule. In yet another embodiment, the expression vector comprises: a) a transcription initiation region; b) a transcription termination region; c) an intron; and d) a nucleic acid sequence encoding at least one siNA molecule, wherein the sequence is operably linked to the initiation region,  
30 the intron and the termination region in a manner which allows expression and/or delivery of the nucleic acid molecule.

In another embodiment, the expression vector comprises: a) a transcription initiation region; b) a transcription termination region; c) an intron; d) an open reading frame; and e) a nucleic acid sequence encoding at least one strand of a siNA molecule, wherein the sequence is operably linked to the 3'-end of the open reading frame and  
5 wherein the sequence is operably linked to the initiation region, the intron, the open reading frame and the termination region in a manner which allows expression and/or delivery of the siNA molecule.

Examples:

The following are non-limiting examples showing the selection, isolation, synthesis  
10 and activity of nucleic acids of the instant invention.

Example 1: Tandem synthesis of siNA constructs

Exemplary siNA molecules of the invention are synthesized in tandem using a cleavable linker, for example, a succinyl-based linker. Tandem synthesis as described herein is followed by a one-step purification process that provides RNAi molecules in  
15 high yield. This approach is highly amenable to siNA synthesis in support of high throughput RNAi screening, and can be readily adapted to multi-column or multi-well synthesis platforms.

After completing a tandem synthesis of a siNA oligo and its complement in which the 5'-terminal dimethoxytrityl (5'-O-DMT) group remains intact (trityl on synthesis), the  
20 oligonucleotides are deprotected as described above. Following deprotection, the siNA sequence strands are allowed to spontaneously hybridize. This hybridization yields a duplex in which one strand has retained the 5'-O-DMT group while the complementary strand comprises a terminal 5'-hydroxyl. The newly formed duplex behaves as a single molecule during routine solid-phase extraction purification (Trityl-On purification) even  
25 though only one molecule has a dimethoxytrityl group. Because the strands form a stable duplex, this dimethoxytrityl group (or an equivalent group, such as other trityl groups or other hydrophobic moieties) is all that is required to purify the pair of oligos, for example, by using a C18 cartridge.

Standard phosphoramidite synthesis chemistry is used up to the point of introducing a tandem linker, such as an inverted deoxy abasic succinate or glyceryl succinate linker (see **Figure 1**) or an equivalent cleavable linker. A non-limiting example of linker coupling conditions that can be used includes a hindered base such as diisopropylethylamine (DIPA) and/or DMAP in the presence of an activator reagent such as Bromotripyrrolidinophosphoniumhexafluorophosphate (PyBrOP). After the linker is coupled, standard synthesis chemistry is utilized to complete synthesis of the second sequence leaving the terminal the 5'-O-DMT intact. Following synthesis, the resulting oligonucleotide is deprotected according to the procedures described herein and quenched with a suitable buffer, for example with 50mM NaOAc or 1.5M  $\text{NH}_4\text{H}_2\text{CO}_3$ .

Purification of the siNA duplex can be readily accomplished using solid phase extraction, for example using a Waters C18 SepPak 1g cartridge conditioned with 1 column volume (CV) of acetonitrile, 2 CV  $\text{H}_2\text{O}$ , and 2 CV 50mM NaOAc. The sample is loaded and then washed with 1 CV  $\text{H}_2\text{O}$  or 50mM NaOAc. Failure sequences are eluted with 1 CV 14% ACN (Aqueous with 50mM NaOAc and 50mM NaCl). The column is then washed, for example with 1 CV  $\text{H}_2\text{O}$  followed by on-column detritylation, for example by passing 1 CV of 1% aqueous trifluoroacetic acid (TFA) over the column, then adding a second CV of 1% aqueous TFA to the column and allowing to stand for approximately 10 minutes. The remaining TFA solution is removed and the column washed with  $\text{H}_2\text{O}$  followed by 1 CV 1M NaCl and additional  $\text{H}_2\text{O}$ . The siNA duplex product is then eluted, for example, using 1 CV 20% aqueous CAN.

**Figure 2** provides an example of MALDI-TOV mass spectrometry analysis of a purified siNA construct in which each peak corresponds to the calculated mass of an individual siNA strand of the siNA duplex. The same purified siNA provides three peaks when analyzed by capillary gel electrophoresis (CGE), one peak presumably corresponding to the duplex siNA, and two peaks presumably corresponding to the separate siNA sequence strands. Ion exchange HPLC analysis of the same siNA contract only shows a single peak. Testing of the purified siNA construct using a luciferase reporter assay described below demonstrated the same RNAi activity compared to siNA constructs generated from separately synthesized oligonucleotide sequence strands.

Example 2: Serum stability of chemically modified siNA constructs

Chemical modifications were introduced into siNA constructs to determine the stability of these constructs compared to native siNA oligonucleotides (containing two thymidine nucleotide overhangs) in human serum. An investigation of the serum stability of RNA duplexes revealed that siNA constructs consisting of all RNA nucleotides containing two thymidine nucleotide overhangs have a half-life in serum of 15 seconds, whereas chemically modified siNA constructs remained stable in serum for 1 to 3 days depending on the extent of modification. RNAi stability tests were performed by internally labeling one strand (strand 1) of siNA and duplexing with 1.5 X the concentration of the complementary siNA strand (strand 2) (to insure all labeled material was in duplex form). Duplexed siNA constructs were then tested for stability by incubating at a final concentration of 2 $\mu$ M siNA (strand 2 concentration) in 90% mouse or human serum for time-points of 30sec, 1min, 5min, 30min, 90min, 4hrs 10min, 16hrs 24min, and 49hrs. Time points were run on a 15% denaturing polyacrylamide gels and analyzed on a phosphoimager.

Internal labeling was performed via kinase reactions with polynucleotide kinase (PNK) and  $^{32}$ P- $\gamma$ -ATP, with addition of radiolabeled phosphate at nucleotide 13 of strand 2, counting in from the 3' side. Ligation of the remaining 8-mer fragments with T4 RNA ligase resulted in the full length, 21-mer, strand 2. Duplexing of RNAi was done by adding appropriate concentrations of the siNA oligonucleotides and heating to 95 $^{\circ}$  C for 5min followed by slow cooling to room temperature. Reactions were performed by adding 100% serum to the siNA duplexes and incubating at 37 $^{\circ}$  C, then removing aliquots at desired time-points. Results of this study are summarized in **Figure 3**. As shown in the Figure 3, chemically modified siNA molecules (e.g., SEQ ID NOs: 925/927, 925/928, 925/929, 925/930, and 925/931) have significantly increased serum stability compared to an siNA construct having all ribonucleotides except a 3'-terminal dithymidine (TT) modification (e.g., SEQ ID NOs: 925/926).

### Example 3: Identification of potential siNA target sites in any RNA sequence

The sequence of an RNA target of interest, such as a viral or human mRNA transcript, is screened for target sites, for example by using a computer folding algorithm. In a non-limiting example, the sequence of a gene or RNA gene transcript derived from a database, such as Genbank, is used to generate siNA targets having complementarity to

the target. Such sequences can be obtained from a database, or can be determined experimentally as known in the art. Target sites that are known, for example, those target sites determined to be effective target sites based on studies with other nucleic acid molecules, for example ribozymes or antisense, or those targets known to be associated with a disease or condition such as those sites containing mutations or deletions, can be used to design siNA molecules targeting those sites. Various parameters can be used to determine which sites are the most suitable target sites within the target RNA sequence. These parameters include but are not limited to secondary or tertiary RNA structure, the nucleotide base composition of the target sequence, the degree of homology between various regions of the target sequence, or the relative position of the target sequence within the RNA transcript. Based on these determinations, any number of target sites within the RNA transcript can be chosen to screen siNA molecules for efficacy, for example by using *in vitro* RNA cleavage assays, cell culture, or animal models. In a non-limiting example, anywhere from 1 to 1000 target sites are chosen within the transcript based on the size of the siNA construct to be used. High throughput screening assays can be developed for screening siNA molecules using methods known in the art, such as with multi-well or multi-plate assays or combinatorial/siNA library screening assays to determine efficient reduction in target gene expression.

#### Example 4: Selection of siNA molecule target sites in a RNA

The following non-limiting steps can be used to carry out the selection of siNAs targeting a given gene sequence or transcript.

The target sequence is parsed *in silico* into a list of all fragments or subsequences of a particular length, for example 23 nucleotide fragments, contained within the target sequence. This step is typically carried out using a custom Perl script, but commercial sequence analysis programs such as Oligo, MacVector, or the GCG Wisconsin Package can be employed as well.

In some instances the siNAs correspond to more than one target sequence; such would be the case for example in targeting different transcripts of the same gene, targeting different transcripts of more than one gene, or for targeting both the human gene and an animal homolog. In this case, a subsequence list of a particular length is generated for each of the targets, and then the lists are compared to find matching sequences in each

list. The subsequences are then ranked according to the number of target sequences that contain the given subsequence; the goal is to find subsequences that are present in most or all of the target sequences. Alternately, the ranking can identify subsequences that are unique to a target sequence, such as a mutant target sequence. Such an approach would  
5 enable the use of siNA to target specifically the mutant sequence and not effect the expression of the normal sequence.

In some instances the siNA subsequences are absent in one or more sequences while present in the desired target sequence; such would be the case if the siNA targets a gene with a paralogous family member that is to remain untargeted. As in case 2 above, a  
10 subsequence list of a particular length is generated for each of the targets, and then the lists are compared to find sequences that are present in the target gene but are absent in the untargeted paralog.

The ranked siNA subsequences can be further analyzed and ranked according to GC content. A preference can be given to sites containing 30-70% GC, with a further  
15 preference to sites containing 40-60% GC.

The ranked siNA subsequences can be further analyzed and ranked according to self-folding and internal hairpins. Weaker internal folds are preferred; strong hairpin structures are to be avoided.

The ranked siNA subsequences can be further analyzed and ranked according to  
20 whether they have runs of GGG or CCC in the sequence. GGG (or even more Gs) in either strand can make oligonucleotide synthesis problematic and can potentially interfere with RNAi activity, so it is avoided whenever other appropriately suitable sequences are available. CCC is searched in the target strand because that will place GGG in the antisense strand.

25 The ranked siNA subsequences can be further analyzed and ranked according to whether they have the dinucleotide UU (uridine dinucleotide) on the 3'-end of the sequence, and/or AA on the 5'-end of the sequence (to yield 3' UU on the antisense sequence). These sequences allow one to design siNA molecules with terminal TT thymidine dinucleotides.



Four or five target sites are chosen from the ranked list of subsequences as described above. For example, in subsequences having 23 nucleotides, the right 21 nucleotides of each chosen 23-mer subsequence are then designed and synthesized for the upper (sense) strand of the siNA duplex, while the reverse complement of the left 21 nucleotides of each chosen 23-mer subsequence are then designed and synthesized for the lower (antisense) strand of the siNA duplex (see Tables I). If terminal TT residues are desired for the sequence (as described in paragraph 7), then the two 3' terminal nucleotides of both the sense and antisense strands are replaced by TT prior to synthesizing the oligos.

- 10 The siNA molecules are screened in an in vitro, cell culture or animal model system to identify the most active siNA molecule or the most preferred target site within the target RNA sequence.

- In an alternate approach, a pool of siNA constructs specific to a target sequence is used to screen for target sites in cells expressing target RNA, such as human HeLa cells.
- 15 The general strategy used in this approach is shown in **Figure 21**. A non-limiting example of such as pool is a pool comprising sequences having antisense sequences complementary to the target RNA sequence and sense sequences complementary to the antisense sequences. Cells (e.g., HeLa cells) expressing the target gene are transfected with the pool of siNA constructs and cells that demonstrate a phenotype associated with gene silencing are sorted. The pool of siNA constructs can be chemically modified as described herein and synthesized, for example, in a high throughput manner. The siNA from cells demonstrating a positive phenotypic change (e.g., decreased target mRNA levels or target protein expression), are identified, for example by positional analysis within the assay, and are used to determine the most suitable target site(s) within the target RNA sequence based upon the complementary sequence to the corresponding siNA antisense strand identified in the assay.
- 20
- 25

#### Example 5: RNAi activity of chemically modified siNA constructs

- Short interfering nucleic acid (siNA) is emerging as a powerful tool for gene regulation. All-ribose siNA duplexes activate the RNAi pathway but have limited utility as therapeutic compounds due to their nuclease sensitivity and short half-life in serum, as shown in Example 2 above. To develop nuclease-resistant siNA constructs for *in vivo*
- 30

applications, siNAs that target luciferase mRNA and contain stabilizing chemical modifications were tested for activity in HeLa cells. The sequences for the siNA oligonucleotide sequences used in this study are shown in **Table I**. Modifications included phosphorothioate linkages (P=S), 2'-O-methyl nucleotides, or 2'-fluoro (F) nucleotides in one or both siNA strands and various 3'-end stabilization chemistries, including 3'-glyceryl, 3'-inverted abasic, 3'-inverted Thymidine, and/or Thymidine. Active siNA containing stabilizing modifications such as described herein should prove useful for *in vivo* applications.

A luciferase reporter system was utilized to test RNAi activity of chemically modified siNA constructs compared to siNA constructs consisting of all RNA nucleotides containing two thymidine nucleotide overhangs. Sense and antisense siNA strands (20  $\mu$ M each) were annealed by incubation in buffer (100 mM potassium acetate, 30 mM HEPES-KOH, pH 7.4, 2 mM magnesium acetate) for 1 min. at 90°C followed by 1 hour at 37°C. Plasmids encoding firefly luciferase (pGL2) and renilla luciferase (pRLSV40) were purchased from Promega Biotech.

HeLa S3 cells were grown at 37°C in DMEM with 5% FBS and seeded at 15,300 cells in 100  $\mu$ l media per well of a 96-well plate 24 hours prior to transfection. For transfection, 4  $\mu$ l Lipofectamine 2000 (Life Technologies) was added to 96  $\mu$ l OPTI-MEM, vortexed and incubated at room temperature for 5 minutes. The 100  $\mu$ l diluted lipid was then added to a microtiter tube containing 5  $\mu$ l pGL2 (200ng/ $\mu$ l), 5  $\mu$ l pRLSV40 (8 ng/ $\mu$ l) 6  $\mu$ l siNA (25 nM or 10 nM final), and 84  $\mu$ l OPTI-MEM, vortexed briefly and incubated at room temperature for 20 minutes. The transfection mix was then mixed briefly and 50  $\mu$ l was added to each of three wells that contained HeLa S3 cells in 100  $\mu$ l media. Cells were incubated for 20 hours after transfection and analyzed for luciferase expression using the Dual luciferase assay according to the manufacturer's instructions (Promega Biotech). The results of this study are summarized in **Figures 4-16**. The sequences of the siNA strands used in this study are shown in Table I and are referred to by RPI# in the figures. Normalized luciferase activity is reported as the ratio of firefly luciferase activity to renilla luciferase activity in the same sample. Error bars represent standard deviation of triplicate transfections. As shown in **Figures 4-16**, the RNAi activity of chemically modified constructs is comparable to that of control siNA constructs, which consist of all ribonucleotides at every position except the 3'-terminus

which comprises two thymidine nucleotide overhangs. In some instances, the RNAi activity of the chemically modified constructs is greater than the siNA construct consisting of all ribonucleotides at every position except the 3'-terminus which comprises two thymidine nucleotide overhangs. For example, **Figure 4** shows results obtained from a screen using phosphorothioate modified siNA constructs; the RPI 27654/27659 construct contains phosphorothioate substitutions for every pyrimidine nucleotide in both sequences, the RPI 27657/27662 construct contains 5 terminal 3'-phosphorothioate substitutions in each strand, the RPI 27649/27658 construct contains all phosphorothioate substitutions only in the antisense strand, whereas the RPI 27649/27660 and RPI 27649/27661 constructs have unmodified sense strands and varying degrees of phosphorothioate substitutions in the antisense strand. All of these constructs show significant RNAi activity when compared to a scrambled siNA.

**Figure 5** shows results obtained from a screen using phosphorothioate (RPI 28253/28255 and RPI 28254/28256) and universal base substitutions (RPI 28257/28259 and RPI 28258/28260) compared to the same controls described above. As shown, these modifications show equivalent or better RNAi activity when compared to the control siNA construct.

**Figure 6** shows results obtained from a screen using 2'-O-methyl modified siNA constructs in which the sense strand contains either 10 (RPI 28244/27650) or 5 (RPI 28245/27650) 2'-O-methyl substitutions, both with comparable activity to the control siNA construct.

**Figure 7** shows results obtained from a screen using 2'-O-methyl or 2'-deoxy-2'-fluoro modified siNA constructs compared to a control construct consisting of all ribonucleotides at every position except the 3'-terminus which comprises two thymidine nucleotide overhangs.

**Figure 8** compares a siNA construct containing six phosphorothioate substitutions in each strand (RPI 28460/28461), where 5 phosphorothioates are present at the 3' end and a single phosphorothioate is present at the 5' end of each strand. This motif shows very similar activity to the control siNA construct consisting of all ribonucleotides at every position except the 3'-terminus which comprises two thymidine nucleotide overhangs.

**Figure 9** compares a siNA construct synthesized by the method of the invention described in Example 1, wherein an inverted deoxyabasic succinate linker was used to generate a siNA having a 3'-inverted deoxyabasic cap on the antisense strand of the siNA. This construct shows improved activity compared to the control siNA (siGL2) construct consisting of all ribonucleotides at every position except the 3'-terminus which comprises two thymidine nucleotide overhangs.

**Figure 10** shows the results of an RNAi activity screen of chemically modified siNA constructs including 3'-glyceryl modified siNA constructs compared to an all RNA control siNA construct using a luciferase reporter system. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. As shown in the Figure, the 3'-terminal modified siNA constructs retain significant RNAi activity compared to the control siNA (siGL2) construct.

**Figure 11** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. As shown in the figure, the chemically modified RPI 30063/30430, RPI 30433/30430, and RPI 30063/30224 constructs retain significant RNAi activity compared to the control siNA construct. It should be noted that RPI 30433/30430 is a siNA construct having no ribonucleotides which retains significant RNAi activity compared to the control siGL2 construct in vitro, therefore, this construct is expected to

have both similar RNAi activity and improved stability compared to siNA constructs having ribonucleotides *in vivo*.

**Figure 12** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. As shown in the figure, the chemically modified RPI 30063/30224 and RPI 30063/30430 constructs retain significant RNAi activity compared to the control siNA (siGL2) construct. In addition, the antisense strand alone (RPI 30430) and an inverted control (RPI 30227/30229, having matched chemistry to RPI 30063/30224) were compared to the siNA duplexes described above. The antisense strand (RPI 30430) alone provides far less inhibition compared to the siNA duplexes using this sequence.

**Figure 13** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemical modifications and antisense strand chemical modifications. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. In addition, an inverted control (RPI 30226/30229, having matched chemistry to RPI 30222/30224) was compared to the siNA duplexes described above. As shown in the figure, the chemically modified RPI 28251/30430, RPI 28251/30224, and RPI 30222/30224 constructs retain significant RNAi activity compared to the control siNA construct, and the chemically modified RPI 28251/30430 construct demonstrates improved activity compared to the control siNA (siGL2) construct.

**Figure 14** shows the results of an RNAi activity screen of chemically modified siNA constructs including various 3'-terminal modified siNA constructs compared to an all RNA control siNA construct using a luciferase reporter system. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. As shown in the figure, the chemically modified RPI 30222/30546, 30222/30224, 30222/30551, 30222/30557 and 30222/30558 constructs retain significant RNAi activity compared to the control siNA construct.

**Figure 15** shows the results of an RNAi activity screen of chemically modified siNA constructs. The screen compared various combinations of sense strand chemistries compared to a fixed antisense strand chemistry. These chemically modified siNAs were compared in the luciferase assay described herein at 1 nM and 10nM concentration using an all RNA siNA control (siGL2) having having 3'-terminal dithymidine (TT) and its corresponding inverted control (Inv siGL2). The background level of luciferase expression in the HeLa cells is designated by the "cells" column. Sense and antisense strands of chemically modified siNA constructs are shown by RPI number (sense strand/antisense strand). Sequences corresponding to these RPI numbers are shown in Table I. As shown in the figure, the chemically modified RPI 30063/30430, 30434/30430, and 30435/30430 constructs all demonstrate greater activity compared to the control siNA (siGL2) construct.

#### 25 Example 6: RNAi activity titration

A titration assay was performed to determine the lower range of siNA concentration required for RNAi activity both in a control siNA construct consisting of all RNA nucleotides containing two thymidine nucleotide overhangs and a chemically modified siNA construct comprising 5 phosphorothioate internucleotide linkages in both the sense and antisense strands. The assay was performed as described above, however, the siNA constructs were diluted to final concentrations between 2.5 nM and 0.025 nM. Results

are shown in **Figure 16**. As shown in **Figure 16**, the chemically modified siNA construct shows a very similar concentration dependent RNAi activity profile to the control siNA construct when compared to an inverted siNA sequence control.

#### Example 7: siNA design

5        siNA target sites were chosen by analyzing sequences of the target RNA and optionally prioritizing the target sites on the basis of folding (structure of any given sequence analyzed to determine siNA accessibility to the target), by using a library of siNA molecules as described in Example 4, or alternately by using an *in vitro* siNA system as described in Example 9 herein. siNA molecules were designed that could bind  
10 each target and are optionally individually analyzed by computer folding to assess whether the siNA molecule can interact with the target sequence. Varying the length of the siNA molecules can be chosen to optimize activity. Generally, a sufficient number of complementary nucleotide bases are chosen to bind to, or otherwise interact with, the target RNA, but the degree of complementarity can be modulated to accommodate siNA  
15 duplexes or varying length or base composition. By using such methodologies, siNA molecules can be designed to target sites within any known RNA sequence, for example those RNA sequences corresponding to the any gene transcript.

Chemically modified siNA constructs are designed to provide nuclease stability for systemic administration *in vivo* and/or improved pharmacokinetic, localization, and  
20 delivery properties while preserving the ability to mediate RNAi activity. Chemical modifications as described herein are introduced synthetically using synthetic methods described herein and those generally known in the art. The synthetic siNA constructs are then assayed for nuclease stability in serum and/or cellular/tissue extracts (e.g. liver extracts). The synthetic siNA constructs are also tested in parallel for RNAi activity  
25 using an appropriate assay, such as a luciferase reporter assay as described herein or another suitable assay that can quantify RNAi activity. Synthetic siNA constructs that possess both nuclease stability and RNAi activity can be further modified and re-evaluated in stability and activity assays. The chemical modifications of the stabilized active siNA constructs can then be applied to any siNA sequence targeting any chosen  
30 RNA and used, for example, in target screening assays to pick lead siNA compounds for therapeutic development (see for example **Figure 24**).

Example 8: Chemical Synthesis and Purification of siNA

siNA molecules can be designed to interact with various sites in the RNA message, for example, target sequences within the RNA sequences described herein. The sequence of one strand of the siNA molecule(s) is complementary to the target site sequences  
 5 described above. The siNA molecules can be chemically synthesized using methods described herein. Inactive siNA molecules that are used as control sequences can be synthesized by scrambling the sequence of the siNA molecules such that it is not complementary to the target sequence. Generally, siNA constructs can be synthesized using solid phase oligonucleotide synthesis methods as described herein (see for example  
 10 Usman *et al.*, US Patent Nos. 5,804,683; 5,831,071; 5,998,203; 6,117,657; 6,353,098; 6,362,323; 6,437,117; 6,469,158; Scaringe *et al.*, US Patent Nos. 6,111,086; 6,008,400; 6,111,086 all incorporated by reference herein in their entirety).

In a non-limiting example, RNA oligonucleotides are synthesized in a stepwise fashion using the phosphoramidite chemistry as is known in the art. Standard  
 15 phosphoramidite chemistry involves the use of nucleosides comprising any of 5'-O-dimethoxytrityl, 2'-O-tert-butyldimethylsilyl, 3'-O-2-Cyanoethyl N,N-diisopropylphosphoroamidite groups, and exocyclic amine protecting groups (e.g. N6-benzoyl adenosine, N4 acetyl cytidine, and N2-isobutyryl guanosine). Alternately, 2'-O-Silyl Ethers can be used in conjunction with acid-labile 2'-O-orthoester protecting groups in the synthesis of  
 20 RNA as described by Scaringe *supra*. Differing 2' chemistries can require different protecting groups, for example 2'-deoxy-2'-amino nucleosides can utilize N-phthaloyl protection as described by Usman *et al.*, US Patent 5,631,360, incorporated by reference herein in its entirety).

During solid phase synthesis, each nucleotide is added sequentially (3'- to 5'-  
 25 direction) to the solid support-bound oligonucleotide. The first nucleoside at the 3'-end of the chain is covalently attached to a solid support (e.g., controlled pore glass or polystyrene) using various linkers. The nucleotide precursor, a ribonucleoside phosphoramidite, and activator are combined resulting in the coupling of the second nucleoside phosphoramidite onto the 5'-end of the first nucleoside. The support is then  
 30 washed and any unreacted 5'-hydroxyl groups are capped with a capping reagent such as acetic anhydride to yield inactive 5'-acetyl moieties. The trivalent phosphorus linkage is



then oxidized to a more stable phosphate linkage. At the end of the nucleotide addition cycle, the 5'-O-protecting group is cleaved under suitable conditions (e.g., acidic conditions for trityl-based groups and Fluoride for silyl-based groups). The cycle is repeated for each subsequent nucleotide.

5        Modification of synthesis conditions can be used to optimize coupling efficiency, for example by using differing coupling times, differing reagent/phosphoramidite concentrations, differing contact times, differing solid supports and solid support linker chemistries depending on the particular chemical composition of the siNA to be synthesized. Deprotection and purification of the siNA can be performed as is generally  
10        described in Usman et al., US 5,831,071, US 6,353,098, US 6,437,117, and Bellon et al., US 6,054,576, US 6,162,909, US 6,303,773, incorporated by reference herein in their entirety or Scaringe *supra*. Additionally, deprotection conditions can be modified to provide the best possible yield and purity of siNA constructs. For example, applicant has observed that oligonucleotides comprising 2'-deoxy-2'-fluoro nucleotides can degrade  
15        under inappropriate deprotection conditions. Such oligonucleotides are deprotected using aqueous methylamine at about 35°C for 30 minutes. If the 2'-deoxy-2'-fluoro containing oligonucleotide also comprises ribonucleotides, after deprotection with aqueous methylamine at about 35°C for 30 minutes, TEA-HF is added and the reaction maintained at about 65°C for an additional 15 minutes.

#### 20        Example 9: RNAi *in vitro* assay to assess siNA activity

An *in vitro* assay that recapitulates RNAi in a cell free system is used to evaluate siNA constructs specific to target RNA. The assay comprises the system described by Tuschl *et al.*, 1999, *Genes and Development*, 13, 3191-3197 and Zamore *et al.*, 2000, *Cell*, 101, 25-33 adapted for use with target RNA. A *Drosophila* extract derived from  
25        syncytial blastoderm is used to reconstitute RNAi activity *in vitro*. Target RNA is generated via *in vitro* transcription from an appropriate plasmid using T7 RNA polymerase or via chemical synthesis as described herein. Sense and antisense siNA strands (for example 20 uM each) are annealed by incubation in buffer (such as 100 mM potassium acetate, 30 mM HEPES-KOH, pH 7.4, 2 mM magnesium acetate) for 1 min. at  
30        90°C followed by 1 hour at 37°C, then diluted in lysis buffer (for example 100 mM potassium acetate, 30 mM HEPES-KOH at pH 7.4, 2mM magnesium acetate). Annealing

can be monitored by gel electrophoresis on an agarose gel in TBE buffer and stained with ethidium bromide. The *Drosophila* lysate is prepared using zero to two-hour-old embryos from Oregon R flies collected on yeasted molasses agar that are dechorionated and lysed. The lysate is centrifuged and the supernatant isolated. The assay comprises a reaction mixture containing 50% lysate [vol/vol], RNA (10-50 pM final concentration), and 10% [vol/vol] lysis buffer containing siNA (10 nM final concentration). The reaction mixture also contains 10 mM creatine phosphate, 10 ug/ml creatine phosphokinase, 100 uM GTP, 100 uM UTP, 100 uM CTP, 500 uM ATP, 5 mM DTT, 0.1 U/uL RNasin (Promega), and 100 uM of each amino acid. The final concentration of potassium acetate is adjusted to 100 mM. The reactions are pre-assembled on ice and preincubated at 25° C for 10 minutes before adding RNA, then incubated at 25° C for an additional 60 minutes. Reactions are quenched with 4 volumes of 1.25 x Passive Lysis Buffer (Promega). Target RNA cleavage is assayed by RT-PCR analysis or other methods known in the art and are compared to control reactions in which siNA is omitted from the reaction.

Alternately, internally-labeled target RNA for the assay is prepared by *in vitro* transcription in the presence of [ $\alpha$ - $^{32}$ P] CTP, passed over a G 50 Sephadex column by spin chromatography and used as target RNA without further purification. Optionally, target RNA is 5'- $^{32}$ P-end labeled using T4 polynucleotide kinase enzyme. Assays are performed as described above and target RNA and the specific RNA cleavage products generated by RNAi are visualized on an autoradiograph of a gel. The percentage of cleavage is determined by Phosphor Imager<sup>®</sup> quantitation of bands representing intact control RNA or RNA from control reactions without siNA and the cleavage products generated by the assay.

In one embodiment, this assay is used to determine target sites the RNA target for siNA mediated RNAi cleavage, wherein a plurality of siNA constructs are screened for RNAi mediated cleavage of the RNA target, for example, by analyzing the assay reaction by electrophoresis of labeled target RNA, or by northern blotting, as well as by other methodology well known in the art.

#### Example 10: Nucleic acid inhibition of target RNA *in vivo*

siNA molecules targeted to the target RNA are designed and synthesized as described above. These nucleic acid molecules can be tested for cleavage activity *in vivo*, for example, using the following procedure.

Two formats are used to test the efficacy of siNAs targeting a particular gene transcript. First, the reagents are tested on target expressing cells (e.g., HeLa), to determine the extent of RNA and protein inhibition. siNA reagents are selected against the RNA target. RNA inhibition is measured after delivery of these reagents by a suitable transfection agent to cells. Relative amounts of target RNA are measured versus actin using real-time PCR monitoring of amplification (eg., ABI 7700 Taqman®). A comparison is made to a mixture of oligonucleotide sequences made to unrelated targets or to a randomized siNA control with the same overall length and chemistry, but randomly substituted at each position. Primary and secondary lead reagents are chosen for the target and optimization performed. After an optimal transfection agent concentration is chosen, a RNA time-course of inhibition is performed with the lead siNA molecule. In addition, a cell-plating format can be used to determine RNA inhibition.

#### Delivery of siNA to Cells

Cells (e.g., HeLa) are seeded, for example, at  $1 \times 10^5$  cells per well of a six-well dish in EGM-2 (BioWhittaker) the day before transfection. siNA (final concentration, for example 20nM) and cationic lipid (e.g., final concentration  $2 \mu\text{g/ml}$ ) are complexed in EGM basal media (Biowhittaker) at  $37^\circ\text{C}$  for 30 mins in polystyrene tubes. Following vortexing, the complexed siNA is added to each well and incubated for the times indicated. For initial optimization experiments, cells are seeded, for example, at  $1 \times 10^3$  in 96 well plates and siNA complex added as described. Efficiency of delivery of siNA to cells is determined using a fluorescent siNA complexed with lipid. Cells in 6-well dishes are incubated with siNA for 24 hours, rinsed with PBS and fixed in 2% paraformaldehyde for 15 minutes at room temperature. Uptake of siNA is visualized using a fluorescent microscope.

#### Taqman and Lightcycler quantification of mRNA

Total RNA is prepared from cells following siNA delivery, for example, using Qiagen RNA purification kits for 6-well or Rneasy extraction kits for 96-well assays. For

- Taqman analysis, dual-labeled probes are synthesized with the reporter dye, FAM or JOE, covalently linked at the 5'-end and the quencher dye TAMRA conjugated to the 3'-end. One-step RT-PCR amplifications are performed on, for example, an ABI PRISM 7700 Sequence Detector using 50 µl reactions consisting of 10 µl total RNA, 100 nM forward primer, 900 nM reverse primer, 100 nM probe, 1X TaqMan PCR reaction buffer (PE-Applied Biosystems), 5.5 mM MgCl<sub>2</sub>, 300 µM each dATP, dCTP, dGTP, and dTTP, 10U RNase Inhibitor (Promega), 1.25U AmpliTaq Gold (PE-Applied Biosystems) and 10U M-MLV Reverse Transcriptase (Promega). The thermal cycling conditions can consist of 30 min at 48°C, 10 min at 95°C, followed by 40 cycles of 15 sec at 95°C and 1 min at 60°C.
- Quantitation of mRNA levels is determined relative to standards generated from serially diluted total cellular RNA (300, 100, 33, 11 ng/rxn) and normalizing to β-actin or GAPDH mRNA in parallel TaqMan reactions. For each gene of interest an upper and lower primer and a fluorescently labeled probe are designed. Real time incorporation of SYBR Green I dye into a specific PCR product can be measured in glass capillary tubes using a lightcycler. A standard curve is generated for each primer pair using control cRNA. Values are represented as relative expression to GAPDH in each sample.

#### Western blotting

- Nuclear extracts can be prepared using a standard micro preparation technique (see for example Andrews and Faller, 1991, *Nucleic Acids Research*, 19, 2499). Protein extracts from supernatants are prepared, for example using TCA precipitation. An equal volume of 20% TCA is added to the cell supernatant, incubated on ice for 1 hour and pelleted by centrifugation for 5 minutes. Pellets are washed in acetone, dried and resuspended in water. Cellular protein extracts are run on a 10% Bis-Tris NuPage (nuclear extracts) or 4-12% Tris-Glycine (supernatant extracts) polyacrylamide gel and transferred onto nitro-cellulose membranes. Non-specific binding can be blocked by incubation, for example, with 5% non-fat milk for 1 hour followed by primary antibody for 16 hour at 4°C. Following washes, the secondary antibody is applied, for example (1:10,000 dilution) for 1 hour at room temperature and the signal detected with SuperSignal reagent (Pierce).

#### 30 Example 11: Animal Models

Various animal models can be used to screen siNA constructs *in vivo* as are known in the art, for example those animal models that are used to evaluate other nucleic acid technologies such as enzymatic nucleic acid molecules (ribozymes) and/or antisense. Such animal models are used to test the efficacy of siNA molecules described herein. In a non-limiting example, siNA molecules that are designed as anti-angiogenic agents can be screened animal models. There are several animal models in which the anti-angiogenesis effect of nucleic acids of the present invention, such as siNA, directed against genes associated with angiogenesis and/or metastasis, such as VEGFR (e.g., VEGFR1, VEGFR2, and VEGFR3) genes. Typically a corneal model has been used to study angiogenesis in rat and rabbit since recruitment of vessels can easily be followed in this normally avascular tissue (Pandey *et al.*, 1995 *Science* 268: 567-569). In these models, a small Teflon or Hydrion disk pretreated with an angiogenesis factor (e.g. bFGF or VEGF) is inserted into a pocket surgically created in the cornea. Angiogenesis is monitored 3 to 5 days later. siNA molecules directed against VEGFR mRNAs are delivered in the disk as well, or dropwise to the eye over the time course of the experiment. In another eye model, hypoxia has been shown to cause both increased expression of VEGF and neovascularization in the retina (Pierce *et al.*, 1995 *Proc. Natl. Acad. Sci. USA.* 92: 905-909; Shweiki *et al.*, 1992 *J. Clin. Invest.* 91: 2235-2243).

Several animal models exist for screening of anti-angiogenic agents. These include corneal vessel formation following corneal injury (Burger *et al.*, 1985 *Cornea* 4: 35-41; Lepri, *et al.*, 1994 *J. Ocular Pharmacol.* 10: 273-280; Ormerod *et al.*, 1990 *Am. J. Pathol.* 137: 1243-1252) or intracorneal growth factor implant (Grant *et al.*, 1993 *Diabetologia* 36: 282-291; Pandey *et al.* 1995 *supra*; Zieche *et al.*, 1992 *Lab. Invest.* 67: 711-715), vessel growth into Matrigel matrix containing growth factors (Passaniti *et al.*, 1992 *supra*), female reproductive organ neovascularization following hormonal manipulation (Shweiki *et al.*, 1993 *Clin. Invest.* 91: 2235-2243), several models involving inhibition of tumor growth in highly vascularized solid tumors (O'Reilly *et al.*, 1994 *Cell* 79: 315-328; Senger *et al.*, 1993 *Cancer and Metas. Rev.* 12: 303-324; Takahashi *et al.*, 1994 *Cancer Res.* 54: 4233-4237; Kim *et al.*, 1993 *supra*), and transient hypoxia-induced neovascularization in the mouse retina (Pierce *et al.*, 1995 *Proc. Natl. Acad. Sci. USA.* 92: 905-909).gene

The cornea model, described in Pandey et al. *supra*, is the most common and well characterized anti-angiogenic agent efficacy screening model. This model involves an avascular tissue into which vessels are recruited by a stimulating agent (growth factor, thermal or alkali burn, endotoxin). The corneal model would utilize the intrastromal  
5 corneal implantation of a Teflon pellet soaked in a VEGF-Hydron solution to recruit blood vessels toward the pellet which can be quantitated using standard microscopic and image analysis techniques. To evaluate their anti-angiogenic efficacy, ribozymes are applied topically to the eye or bound within Hydron on the Teflon pellet itself. This avascular cornea as well as the Matrigel model provide for low background assays.  
10 While the corneal model has been performed extensively in the rabbit, studies in the rat have also been conducted.

The mouse model (Passaniti et al., *supra*) is a non-tissue model which utilizes Matrigel, an extract of basement membrane (Kleinman et al., 1986) or Millipore® filter disk, which can be impregnated with growth factors and anti-angiogenic agents in a liquid  
15 form prior to injection. Upon subcutaneous administration at body temperature, the Matrigel or Millipore® filter disk forms a solid implant. VEGF embedded in the Matrigel or Millipore® filter disk is used to recruit vessels within the matrix of the Matrigel or Millipore® filter disk which can be processed histologically for endothelial cell specific vWF (factor VIII antigen) immunohistochemistry, Trichrome-Masson stain, or  
20 hemoglobin content. Like the cornea, the Matrigel or Millipore® filter disk are avascular; however, it is not tissue. In the Matrigel or Millipore® filter disk model, siNA molecules are administered within the matrix of the Matrigel or Millipore® filter disk to test their anti-angiogenic efficacy. Thus, delivery issues in this model, as with delivery of siNA molecules by Hydron- coated Teflon pellets in the rat cornea model, may be less  
25 problematic due to the homogeneous presence of the siNA within the respective matrix.

The Lewis lung carcinoma and B-16 murine melanoma models are well accepted models of primary and metastatic cancer and are used for initial screening of anti-cancer agents. These murine models are not dependent upon the use of immunodeficient mice, are relatively inexpensive, and minimize housing concerns. Both the Lewis lung and B-  
30 16 melanoma models involve subcutaneous implantation of approximately  $10^6$  tumor cells from metastatically aggressive tumor cell lines (Lewis lung lines 3LL or D122, LLC-

LN7; B-16-BL6 melanoma) in C57BL/6J mice. Alternatively, the Lewis lung model can be produced by the surgical implantation of tumor spheres (approximately 0.8 mm in diameter). Metastasis also may be modeled by injecting the tumor cells directly *i.v.*. In the Lewis lung model, microscopic metastases can be observed approximately 14 days following implantation with quantifiable macroscopic metastatic tumors developing within 21-25 days. The B-16 melanoma exhibits a similar time course with tumor neovascularization beginning 4 days following implantation. Since both primary and metastatic tumors exist in these models after 21-25 days in the same animal, multiple measurements can be taken as indices of efficacy. Primary tumor volume and growth latency as well as the number of micro- and macroscopic metastatic lung foci or number of animals exhibiting metastases can be quantitated. The percent increase in lifespan can also be measured. Thus, these models provide suitable primary efficacy assays for screening systemically administered siNA molecules and siNA formulations.

In the Lewis lung and B-16 melanoma models, systemic pharmacotherapy with a wide variety of agents usually begins 1-7 days following tumor implantation/inoculation with either continuous or multiple administration regimens. Concurrent pharmacokinetic studies can be performed to determine whether sufficient tissue levels of siNA can be achieved for pharmacodynamic effect to be expected. Furthermore, primary tumors and secondary lung metastases can be removed and subjected to a variety of *in vitro* studies (*i.e.* target RNA reduction).

In utilizing these models to assess siNA activity, VEGFR1, VEGFR2, and/or VEGFR3 protein levels can be measured clinically or experimentally by FACS analysis. VEGFR1, VEGFR2, and/or VEGFR3 encoded mRNA levels will be assessed by Northern analysis, RNase-protection, primer extension analysis and/or quantitative RT-PCR. siNA molecules that block VEGFR1, VEGFR2, and/or VEGFR3 protein encoding mRNAs and therefore result in decreased levels of VEGFR1, VEGFR2, and/or VEGFR3 activity by more than 20% *in vitro* can be thus identified.

#### Example 12: siNA-mediated inhibition of angiogenesis *in vivo*

The purpose of this study was to assess the anti-angiogenic activity of siNA targeted against VEGFR1 in the rat cornea model of VEGF induced angiogenesis (see above). These siNA molecules have matched inverted controls which are inactive since

they are not able to interact with the RNA target. The siNA molecules and VEGF were co-delivered using the filter disk method: Nitrocellulose filter disks (Millipore®) of 0.057 diameter were immersed in appropriate solutions and were surgically implanted in rat cornea as described by Pandey *et al.*, *supra*.

5        The stimulus for angiogenesis in this study was the treatment of the filter disk with 30  $\mu$ M VEGF which is implanted within the cornea's stroma. This dose yields reproducible neovascularization stemming from the pericorneal vascular plexus growing toward the disk in a dose-response study 5 days following implant. Filter disks treated only with the vehicle for VEGF show no angiogenic response. The siNA were co-  
 10 administered with VEGF on a disk in two different siNA concentrations. One concern with the simultaneous administration is that the siNA would not be able to inhibit angiogenesis since VEGF receptors can be stimulated. However, Applicant has observed that in low VEGF doses, the neovascular response reverts to normal, suggesting that the VEGF stimulus is essential for maintaining the angiogenic response. Blocking the  
 15 production of VEGF receptors using simultaneous administration of anti-VEGF-R mRNA siNA could attenuate the normal neovascularization induced by the filter disk treated with VEGF.

#### Materials and Methods:

##### *Test Compounds and Controls*

20

R&D Systems VEGF, carrier free at 75  $\mu$ M in 82 mM Tris-Cl, pH 6.9

siNA, 1.67  $\mu$ G/ $\mu$ L, SITE 2340 (SEQ ID NO: 2; SEQ ID NO: 6) sense/antisense

siNA, 1.67  $\mu$ G/ $\mu$ L, INVERTED CONTROL FOR SITE 2340 (SEQ ID NO: 19; SEQ ID NO: 20) sense/antisense

25        siNA 1.67  $\mu$ G/ $\mu$ L, Site 2340 (SEQ ID NO: 419; SEQ ID NO: 420) sense/antisense

##### *Animals*

Harlan Sprague-Dawley Rats, Approximately 225-250g

45 males, 5 animals per group.



### *Husbandry*

Animals are housed in groups of two. Feed, water, temperature and humidity are determined according to Pharmacology Testing Facility performance standards (SOP's) which are in accordance with the 1996 Guide for the Care and Use of Laboratory Animals (NRC). Animals are acclimated to the facility for at least 7 days prior to experimentation. During this time, animals are observed for overall health and sentinels will be bled for baseline serology.

### *Experimental Groups*

Each solution (VEGF and siNAs) was prepared as a **1X** solution for final concentrations shown in the experimental groups described in **Table III**.

### *siNA Annealing Conditions*

siNA sense and antisense strands are annealed for 1 minute in H<sub>2</sub>O at 1.67mg/mL/strand followed by a 1 hour incubation at 37°C producing 3.34 mg/mL of duplexed siNA. For the 20µg/eye treatment, 6 µLs of the 3.34 mg/mL duplex is injected into the eye (see below). The 3.34 mg/mL duplex siNA can then be serially diluted for dose response assays.

### *Preparation of VEGF Filter Disk*

For corneal implantation, 0.57 mm diameter nitrocellulose disks, prepared from 0.45 µm pore diameter nitrocellulose filter membranes (Millipore Corporation), were soaked for 30 min in 1 µL of 75 µM VEGF in 82 mM Tris·HCl (pH 6.9) in covered petri dishes on ice. Filter disks soaked only with the vehicle for VEGF (83 mM Tris-Cl pH 6.9) elicit no angiogenic response.

### *Corneal surgery*

The rat corneal model used in this study was a modified from Koch *et al. Supra* and Pandey *et al., supra*. Briefly, corneas were irrigated with 0.5% povidone iodine solution followed by normal saline and two drops of 2% lidocaine. Under a dissecting microscope (Leica MZ-6), a stromal pocket was created and a presoaked filter disk (see  
 5 above) was inserted into the pocket such that its edge was 1 mm from the corneal limbus.

#### *Intraconjunctival injection of test solutions*

Immediately after disk insertion, the tip of a 40-50  $\mu$ m OD injector (constructed in our laboratory) was inserted within the conjunctival tissue 1 mm away from the edge of  
 10 the corneal limbus that was directly adjacent to the VEGF-soaked filter disk. Six hundred nanoliters of test solution (siNA, inverted control or sterile water vehicle) were dispensed at a rate of 1.2  $\mu$ L/min using a syringe pump (Kd Scientific). The injector was then removed, serially rinsed in 70% ethanol and sterile water and immersed in sterile water between each injection. Once the test solution was injected, closure of the eyelid was  
 15 maintained using microaneurism clips until the animal began to recover gross motor activity. Following treatment, animals were warmed on a heating pad at 37°C.

#### *Quantitation of angiogenic response*

Five days after disk implantation, animals were euthanized following im  
 20 administration of 0.4 mg/kg atropine and corneas were digitally imaged. The neovascular surface area (NSA, expressed in pixels) was measured *postmortem* from blood-filled corneal vessels using computerized morphometry (Image Pro Plus, Media Cybernetics, v2.0). The individual mean NSA was determined in triplicate from three regions of identical size in the area of maximal neovascularization between the filter disk and the  
 25 limbus. The number of pixels corresponding to the blood-filled corneal vessels in these regions was summated to produce an index of NSA. A group mean NSA was then calculated. Data from each treatment group were normalized to VEGF/siNA vehicle-treated control NSA and finally expressed as percent inhibition of VEGF-induced angiogenesis.

#### 30 *Statistics*

After determining the normality of treatment group means, group mean percent inhibition of VEGF-induced angiogenesis was subjected to a one-way analysis of variance. This was followed by two post-hoc tests for significance including Dunnett's (comparison to VEGF control) and Tukey-Kramer (all other group mean comparisons) at  
 5 alpha = 0.05. Statistical analyses were performed using JMP v.3.1.6 (SAS Institute).

Results are graphically represented in **Figure 23**. As shown in **Figure 23**, VEGFR1 site 4229 active siNA at three concentrations were effective at inhibiting angiogenesis compared to the inverted siNA control and the VEGF control. A chemically modified version of the VEGFR1 site 4229 active siNA comprising a sense strand having  
 10 2'-deoxy-2'-fluoro pyrimidines and ribo purines with 5' and 3' terminal inverted deoxyabasic residues (SEQ ID NO: 419) and an antisense strand having having 2'-deoxy-2'-fluoro pyrimidines and ribo purines with a terminal 3'-phosphorothioate internucleotide linkage (SEQ ID NO: 420), showed similar inhibition. This result shows siNA molecules of differing chemically modified composition of the invention are  
 15 capable of significantly inhibiting angiogenesis *in vivo*.

#### Example 13: RNAi mediated inhibition of EGFR (HER1) RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing EGFR (HER1) RNA expression in A549 cells. A549 cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100 µl/well, such that at the time of  
 20 transfection cells are 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50 µl/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150 µl. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were  
 25 incubated at 37°C for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit)  
 30 for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and the percent reduction

of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 25**. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#30988/31064) was compared to a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31300/31301), which was also compared to a matched chemistry inverted control (RPI#31312/31313). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs significantly reduce EGFR RNA expression. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 14: RNAi mediated inhibition of PKC-alpha RNA expression

siNA constructs (**Table I**) are tested for efficacy in reducing PKC-alpha RNA expression in, for example in A549 cells. Cells are plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100 µl/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs are mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50 µl/well and incubated for 20 min. at room temperature. The siNA transfection mixtures are added to cells to give a final siNA concentration of 25 nM in a volume of 150 µl. Each siNA transfection mixture is added to 3 wells for triplicate siNA treatments. Cells are incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA is prepared from each well of treated cells. The supernatants with the transfection mixtures are first removed and discarded, then the cells are lysed and RNA prepared from each well. Target gene expression following treatment is evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data is averaged and the standard deviations determined for each treatment. Normalized data are graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

In a non-limiting example, siNA constructs were screened for activity (see **Figure 26**) and compared to untreated cells, scrambled siNA control constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in **Figure 26**, the siNA constructs significantly reduce PKC-alpha RNA expression. Leads generated from such a screen are then further assayed. In a non-limiting example, siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps are assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides, in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity. These siNA constructs are compared to appropriate matched chemistry inverted controls. In addition, the siNA constructs are also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs, and cells transfected with lipid alone (transfection control).

#### Example 15: RNAi mediated inhibition of Myc RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing Myc (c-Myc) RNA expression in 293T cells. 293T cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells were 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were incubated at 37°C for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and

the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 27**. A screen of siNA constructs was compared to untreated cells, scrambled siNA control constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, three of the siNA constructs (RPI 30993/31069; RPI 30995/31071; and RPI 30996/31072) significantly reduce c-Myc RNA expression. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 16: RNAi mediated inhibition of BCL2 RNA expression

siNA constructs (**Table I**) are tested for efficacy in reducing BCL2 RNA expression in, for example, A549 cells. Cells are plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs are mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures are added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture is added to 3 wells for triplicate siNA treatments. Cells are incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA is prepared from each well of treated cells. The supernatants with the transfection mixtures are first removed and discarded, then the cells are lysed and RNA prepared from each well. Target gene expression following treatment is evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data is averaged and the standard deviations determined for each treatment. Normalized data are graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs is determined.

In a non-limiting example, A549 cells were transfected with 0.25  $\mu$ g/well of lipid complexed with 25 nM siNA. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#30998/31074) was tested along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-

terminal phosphorothioate internucleotide linkage (RPI#31368/31369), which was also compared to a matched chemistry inverted control (RPI#31370/31371) and a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine and 2'-deoxy-2'-fluoro purine nucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxybasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31372/31373) which was also compared to a matched chemistry inverted control (RPI#31374/31375). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in **Figure 28**, the siNA constructs significantly reduce BCL2 RNA expression compared to scrambled, untreated, and transfection controls. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 17: RNAi mediated inhibition of CHK-1 RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing CHK-1 RNA expression in A549 cells. A549 cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 29**. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31003/31079) and a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxybasic caps and in which the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31302/31303), were compared to a matched chemistry inverted control (RPI#31314/31325). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs significantly reduce CHK-1 RNA expression compared to appropriate controls. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 18: RNAi mediated inhibition of BACE RNA expression

siNA constructs (**Table I**) are tested for efficacy in reducing BACE RNA expression in, for example in A549 cells. Cells are plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs are mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures are added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture is added to 3 wells for triplicate siNA treatments. Cells are incubated at 37°C for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA is prepared from each well of treated cells. The supernatants with the transfection mixtures are first removed and discarded, then the cells are lysed and RNA prepared from each well. Target gene expression following treatment is evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data is averaged and the standard deviations determined for each treatment. Normalized data are graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

In a non-limiting example, siNA constructs were screened for activity (see **Figure 30**) and compared to untreated cells, scrambled siNA control constructs (Scram1 and



Scram2), and cells transfected with lipid alone (transfection control). As shown in **Figure 30**, the siNA constructs significantly reduce BACE RNA expression. Leads generated from such a screen are then further assayed. In a non-limiting example, siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps are assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides, in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity. These siNA constructs are compared to appropriate matched chemistry inverted controls. In addition, the siNA constructs are also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs, and cells transfected with lipid alone (transfection control).

#### Example 19: RNAi mediated inhibition of cyclin D1 RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing cyclin D1 RNA expression in A549 cells. A549 cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 31**. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#30988/31064) was assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31300/3130), which was also compared to a matched chemistry inverted control (RPI#31312/31313). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs significantly reduce cyclin D1 RNA expression. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 20: RNAi mediated inhibition of PTP-1B RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing PTP-1B RNA expression in A549 cells. A549 cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 32**. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31018/31094) was assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31306/31307), which was also compared to a matched chemistry inverted control (RPI#31318/31319). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected with lipid alone (transfection control). As shown in the figure, both siNA constructs significantly reduce PTP-1B RNA expression. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 21: RNAi mediated inhibition of ERG2 RNA expression

siNA constructs (**Table I**) are tested for efficacy in reducing ERG2 RNA expression in, for example in DLD1 cells. Cells are plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs are mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures are added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture is added to 3 wells for triplicate siNA treatments. Cells are incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA is prepared from each well of treated cells. The supernatants with the transfection mixtures are first removed and discarded, then the cells are lysed and RNA prepared from each well. Target gene expression following treatment is evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data is averaged and the standard deviations determined for each treatment. Normalized data are graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

In a non-limiting example, siNA constructs were screened for activity (see **Figure 33**) and compared to untreated cells, scrambled siNA control constructs (Scram1 and

Scram2), and cells transfected with lipid alone (transfection control). As shown in **Figure 33**, the siNA constructs significantly reduce of ERG2 RNA expression. Leads generated from such a screen are then further assayed. In a non-limiting example, siNA constructs comprising ribonucleotides and 3'-terminal dithymidine caps are assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides, in which the sense strand of the siNA is further modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

These siNA constructs are compared to appropriate matched chemistry inverted controls. In addition, the siNA constructs are also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs, and cells transfected with lipid alone (transfection control). Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### 15 Example 22: RNAi mediated inhibition of PCNA RNA expression

siNA constructs (**Table I**) were tested for efficacy in reducing PCNA RNA expression in A549 cells. A549 cells were plated approximately 24h before transfection in 96-well plates at 5,000-7,500 cells/well, 100  $\mu$ l/well, such that at the time of transfection cells are 70-90% confluent. For transfection, annealed siNAs were mixed with the transfection reagent (Lipofectamine 2000, Invitrogen) in a volume of 50  $\mu$ l/well and incubated for 20 min. at room temperature. The siNA transfection mixtures were added to cells to give a final siNA concentration of 25 nM in a volume of 150  $\mu$ l. Each siNA transfection mixture was added to 3 wells for triplicate siNA treatments. Cells were incubated at 37° for 24h in the continued presence of the siNA transfection mixture. At 24h, RNA was prepared from each well of treated cells. The supernatants with the transfection mixtures were first removed and discarded, then the cells were lysed and RNA prepared from each well. Target gene expression following treatment was evaluated by RT-PCR for the target gene and for a control gene (36B4, an RNA polymerase subunit) for normalization. The triplicate data were averaged and the standard deviations determined for each treatment. Normalized data were graphed and the percent reduction of target mRNA by active siNAs in comparison to their respective inverted control siNAs was determined.

Results of this study are shown in **Figure 34**. A siNA construct comprising ribonucleotides and 3'-terminal dithymidine caps (RPI#31035/31111) was assayed along with a chemically modified siNA construct comprising 2'-deoxy-2'-fluoro pyrimidine nucleotides and purine ribonucleotides in which the sense strand of the siNA is further  
 5 modified with 5' and 3'-terminal inverted deoxyabasic caps and the antisense strand comprises a 3'-terminal phosphorothioate internucleotide linkage (RPI#31310/31311), which was also compared to a matched chemistry inverted control (RPI#31322/31323). In addition, the siNA constructs were also compared to untreated cells, cells transfected with lipid and scrambled siNA constructs (Scram1 and Scram2), and cells transfected  
 10 with lipid alone (transfection control). As shown in the figure, both siNA constructs significantly reduce PCNA RNA expression. Additional stabilization chemistries as described in **Table IV** are similarly assayed for activity.

#### Example 23: Indications

The siNA molecules of the invention can be used to treat a variety of diseases and  
 15 conditions through modulation of gene expression. Using the methods described herein, chemically modified siNA molecules can be designed to modulate the expression any number of target genes, including but not limited to genes associated with cancer, metabolic diseases, infectious diseases such as viral, bacterial or fungal infections, neurologic diseases, musculoskeletal diseases, diseases of the immune system, diseases  
 20 associated with signaling pathways and cellular messengers, and diseases associated with transport systems including molecular pumps and channels.

Non-limiting examples of various viral genes that can be targeted using siRNA molecules of the invention include Hepatitis C Virus (HCV, for example Genbank  
 25 Accession Nos: D11168, D50483.1, L38318 and S82227), Hepatitis B Virus (HBV, for example GenBank Accession No. AF100308.1), Human Immunodeficiency Virus type 1 (HIV-1, for example GenBank Accession No. U51188), Human Immunodeficiency Virus type 2 (HIV-2, for example GenBank Accession No. X60667), West Nile Virus (WNV for example GenBank accession No. NC\_001563), cytomegalovirus (CMV for example GenBank Accession No. NC\_001347), respiratory syncytial virus (RSV for example  
 30 GenBank Accession No. NC\_001781), influenza virus (for example example GenBank Accession No. AF037412, rhinovirus (for example, GenBank accession numbers:

D00239, X02316, X01087, L24917, M16248, K02121, X01087), papillomavirus (for example GenBank Accession No. NC\_001353), Herpes Simplex Virus (HSV for example GenBank Accession No. NC\_001345), and other viruses such as HTLV (for example GenBank Accession No. AJ430458). Due to the high sequence variability of many viral genomes, selection of siRNA molecules for broad therapeutic applications would likely involve the conserved regions of the viral genome. Nonlimiting examples of conserved regions of the viral genomes include but are not limited to 5'-Non Coding Regions (NCR), 3'- Non Coding Regions (NCR) and/or internal ribosome entry sites (IRES). siRNA molecules designed against conserved regions of various viral genomes will enable efficient inhibition of viral replication in diverse patient populations and may ensure the effectiveness of the siRNA molecules against viral quasi species which evolve due to mutations in the non-conserved regions of the viral genome.

Non-limiting examples of human genes that can be targeted using siRNA molecules of the invention using methods described herein include any human RNA sequence, for example those commonly referred to by Genbank Accession Number. These RNA sequences can be used to design siRNA molecules that inhibit gene expression and therefore abrogate diseases, conditions, or infections associated with expression of those genes. Such non-limiting examples of human genes that can be targeted using siRNA molecules of the invention include VEGFr (VEGFr-1 for example GenBank Accession No. XM\_067723, VEGFr-2 for example GenBank Accession No. AF063658), HER1, HER2, HER3, and HER4 (for example Genbank Accession Nos: NM\_005228, NM\_004448, NM\_001982, and NM\_005235 respectively), telomerase (TERT, for example GenBank Accession No. NM\_003219), telomerase RNA (for example GenBank Accession No. U86046), NFkappaB, Rel-A (for example GenBank Accession No. NM\_005228), NOGO (for example GenBank Accession No. AB020693), NOGO (for example GenBank Accession No. XM\_015620), RAS (for example GenBank Accession No. NM\_004283), RAF (for example GenBank Accession No. XM\_033884), CD20 (for example GenBank Accession No. X07203), METAP2 (for example GenBank Accession No. NM\_003219), CLCA1 (for example GenBank Accession No. NM\_001285), phospholamban (for example GenBank Accession No. NM\_002667), PTP1B (for example GenBank Accession No. M31724), and others, for example, those shown in Table III.

The siNA molecule of the invention can also be used in a variety of agricultural applications involving modulation of endogenous or exogenous gene expression in plants using siNA, including use as insecticidal, antiviral and anti-fungal agents or modulate plant traits such as oil and starch profiles and stress resistance.

5    Example 24: Diagnostic uses

The siNA molecules of the invention can be used in a variety of diagnostic applications, such as in the identification of molecular targets (e.g., RNA) in a variety of applications, for example, in clinical, industrial, environmental, agricultural and/or research settings. Such diagnostic use of siNA molecules involves utilizing reconstituted  
10    RNAi systems, for example, using cellular lysates or partially purified cellular lysates. siNA molecules of this invention can be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of endogenous or exogenous, for example viral, RNA in a cell. The close relationship between siNA activity and the structure of the target RNA allows the detection of mutations in any region of the  
15    molecule, which alters the base-pairing and three-dimensional structure of the target RNA. By using multiple siNA molecules described in this invention, one can map nucleotide changes, which are important to RNA structure and function *in vitro*, as well as in cells and tissues. Cleavage of target RNAs with siNA molecules can be used to inhibit gene expression and define the role of specified gene products in the progression  
20    of disease or infection. In this manner, other genetic targets can be defined as important mediators of the disease. These experiments will lead to better treatment of the disease progression by affording the possibility of combination therapies (e.g., multiple siNA molecules targeted to different genes, siNA molecules coupled with known small molecule inhibitors, or intermittent treatment with combinations siNA molecules and/or  
25    other chemical or biological molecules). Other *in vitro* uses of siNA molecules of this invention are well known in the art, and include detection of the presence of mRNAs associated with a disease, infection, or related condition. Such RNA is detected by determining the presence of a cleavage product after treatment with a siNA using standard methodologies, for example, fluorescence resonance emission transfer (FRET).

30        In a specific example, siNA molecules that cleave only wild-type or mutant forms of the target RNA are used for the assay. The first siNA molecules (*i.e.*, those that cleave

only wild-type forms of target RNA) are used to identify wild-type RNA present in the sample and the second siNA molecules (*i.e.*, those that cleave only mutant forms of target RNA) are used to identify mutant RNA in the sample. As reaction controls, synthetic substrates of both wild-type and mutant RNA are cleaved by both siNA molecules to  
5 demonstrate the relative siNA efficiencies in the reactions and the absence of cleavage of the "non-targeted" RNA species. The cleavage products from the synthetic substrates also serve to generate size markers for the analysis of wild-type and mutant RNAs in the sample population. Thus, each analysis requires two siNA molecules, two substrates and one unknown sample, which is combined into six reactions. The presence of cleavage  
10 products is determined using an RNase protection assay so that full-length and cleavage fragments of each RNA can be analyzed in one lane of a polyacrylamide gel. It is not absolutely required to quantify the results to gain insight into the expression of mutant RNAs and putative risk of the desired phenotypic changes in target cells. The expression of mRNA whose protein product is implicated in the development of the phenotype (*i.e.*,  
15 disease related or infection related) is adequate to establish risk. If probes of comparable specific activity are used for both transcripts, then a qualitative comparison of RNA levels is adequate and decreases the cost of the initial diagnosis. Higher mutant form to wild-type ratios are correlated with higher risk whether RNA levels are compared qualitatively or quantitatively.

20 All patents and publications mentioned in the specification are indicative of the levels of skill of those skilled in the art to which the invention pertains. All references cited in this disclosure are incorporated by reference to the same extent as if each reference had been incorporated by reference in its entirety individually.

One skilled in the art would readily appreciate that the present invention is well  
25 adapted to carry out the objects and obtain the ends and advantages mentioned, as well as those inherent therein. The methods and compositions described herein as presently representative of preferred embodiments are exemplary and are not intended as limitations on the scope of the invention. Changes therein and other uses will occur to those skilled in the art, which are encompassed within the spirit of the invention, are  
30 defined by the scope of the claims.



It will be readily apparent to one skilled in the art that varying substitutions and modifications can be made to the invention disclosed herein without departing from the scope and spirit of the invention. Thus, such additional embodiments are within the scope of the present invention and the following claims. The present invention teaches one skilled in the art to test various combinations and/or substitutions of chemical modifications described herein toward generating nucleic acid constructs with improved activity for mediating RNAi activity. Such improved activity can comprise improved stability, improved bioavailability, and/or improved activation of cellular responses mediating RNAi. Therefore, the specific embodiments described herein are not limiting and one skilled in the art can readily appreciate that specific combinations of the modifications described herein can be tested without undue experimentation toward identifying siNA molecules with improved RNAi activity.

The invention illustratively described herein suitably can be practiced in the absence of any element or elements, limitation or limitations that are not specifically disclosed herein. Thus, for example, in each instance herein any of the terms "comprising", "consisting essentially of", and "consisting of" may be replaced with either of the other two terms. The terms and expressions which have been employed are used as terms of description and not of limitation, and there is no intention that in the use of such terms and expressions of excluding any equivalents of the features shown and described or portions thereof, but it is recognized that various modifications are possible within the scope of the invention claimed. Thus, it should be understood that although the present invention has been specifically disclosed by preferred embodiments, optional features, modification and variation of the concepts herein disclosed may be resorted to by those skilled in the art, and that such modifications and variations are considered to be within the scope of this invention as defined by the description and the appended claims.

In addition, where features or aspects of the invention are described in terms of Markush groups or other grouping of alternatives, those skilled in the art will recognize that the invention is also thereby described in terms of any individual member or subgroup of members of the Markush group or other group.

Table I

| Target     | Target Pos | Target Sequence          | Seq ID | strand    | RPI#  | Aliases                               | Sequence                    | SeqID # |
|------------|------------|--------------------------|--------|-----------|-------|---------------------------------------|-----------------------------|---------|
| ABCB1      | 118        | CAUUCUCCUGGAAAUUCAACCU   | 1      | sense     | 30937 | ABCB1:120U21 siRNA<br>stab04          | B uuccuccuGGAAAUUCAATT B    | 186     |
| ABCB1      | 618        | UUCUUCUCAUGAUGCUGGUGUUU  | 2      | sense     | 30938 | ABCB1:620U21 siRNA<br>stab04          | B ccucucAuGauGcuGGUGuTT B   | 187     |
| ABCB1      | 1867       | CACGAUAGCUGAAACAUAUCGCU  | 3      | sense     | 30939 | ABCB1:1869U21 siRNA<br>stab04         | B cGAuAGcuGAAAAcAuucGTT B   | 188     |
| ABCB1      | 2334       | AAAUGCAGCUGAUGAAUCCAAA   | 4      | sense     | 30940 | ABCB1:2336U21 siRNA<br>stab04         | B AAuGcAGcuGAuGAAuuccATT B  | 189     |
| ABCB1      | 118        | CAUUCUCCUGGAAAUUCAACCU   | 1      | antisense | 30941 | ABCB1:138L21 siRNA<br>(120C) stab05   | GuuGAAuuuccAGGAGGAATsT      | 190     |
| ABCB1      | 618        | UUCUUCUCAUGAUGCUGGUGUUU  | 2      | antisense | 30942 | ABCB1:638L21 siRNA<br>(620C) stab05   | AcAccAGcAuGAGAGAGGTsT       | 191     |
| ABCB1      | 1867       | CACGAUAGCUGAAACAUAUCGCU  | 3      | antisense | 30943 | ABCB1:1887L21 siRNA<br>(1869C) stab05 | cGAuGuuuucAGcuAucGTsT       | 192     |
| ABCB1      | 2334       | AAAUGCAGCUGAUGAAUCCAAA   | 4      | antisense | 30944 | ABCB1:2354L21 siRNA<br>(2336C) stab05 | uGGAuucAucAGcuGcAuTTsT      | 193     |
| ABCB1      | 118        | CAUUCUCCUGGAAAUUCAACCU   | 1      | sense     | 31013 | ABCB1:120U21 siRNA                    | UUCCUCCUGGAAAUUCAACTT       | 194     |
| ABCB1      | 618        | UUCUUCUCAUGAUGCUGGUGUUU  | 2      | sense     | 31014 | ABCB1:620U21 siRNA                    | CCUCUCAUGAUGCUGUGUTT        | 195     |
| ABCB1      | 1867       | CACGAUAGCUGAAACAUAUCGCU  | 3      | sense     | 31015 | ABCB1:1869U21 siRNA                   | CGAUGCUGAAACAUAUCGTT        | 196     |
| ABCB1      | 2334       | AAAUGCAGCUGAUGAAUCCAAA   | 4      | sense     | 31016 | ABCB1:2336U21 siRNA                   | AUUGCAGCUGAUGAAUCCATT       | 197     |
| ABCB1      | 118        | CAUUCUCCUGGAAAUUCAACCU   | 1      | antisense | 31089 | ABCB1:138L21 siRNA<br>(120C)          | GUUGAAUUCAGGAGGAATT         | 198     |
| ABCB1      | 618        | UUCUUCUCAUGAUGCUGGUGUUU  | 2      | antisense | 31090 | ABCB1:638L21 siRNA<br>(620C)          | ACACCAGCAUCAUGAGAGGTT       | 199     |
| ABCB1      | 1867       | CACGAUAGCUGAAACAUAUCGCU  | 3      | antisense | 31091 | ABCB1:1887L21 siRNA<br>(1869C)        | CGAAUGUUUUCAGCUAUCGTT       | 200     |
| ABCB1      | 2334       | AAAUGCAGCUGAUGAAUCCAAA   | 4      | antisense | 31092 | ABCB1:2354L21 siRNA<br>(2336C)        | UGGAUUCAUACAGCUGCAUUTT      | 201     |
| ADORA<br>1 | 919        | AGUUCGAGAAAGGUCAUCAGCAUG | 5      | sense     | 30721 | ADORA:1921U21 siRNA<br>stab04         | B uucGAGAAAGGucAucAGcATT B  | 202     |
| ADORA<br>1 | 1621       | GACCAGGUGUCUAGAGGCAACAG  | 6      | sense     | 30722 | ADORA:1:1623U21 siRNA<br>stab04       | B ccAGGUGucuuAGAGGcAAcTT B  | 203     |
| ADORA<br>1 | 1819       | GGACCAAGCUUAAAGGAGAGGAGA | 7      | sense     | 30723 | ADORA:1:1821U21 siRNA<br>stab04       | B AccAAAGcuuAAGGAGAGGATT B  | 204     |
| ADORA<br>1 | 2773       | GUCGGUUGACCUUCUGAAACAUGA | 8      | sense     | 30724 | ADORA:1:2775U21 siRNA<br>stab04       | B cGGGuuGAccuucuuGAAcAuTT B | 205     |
| ADORA<br>1 | 919        | AGUUCGAGAAAGGUCAUCAGCAUG | 5      | antisense | 30725 | ADORA:1:939L21 siRNA                  | uGcuGAuGAGccuuucGAAATsT     | 206     |

|   |            |      |                          |    |           |       |   |                         |     |
|---|------------|------|--------------------------|----|-----------|-------|---|-------------------------|-----|
| 1 | ADORA<br>1 | 1621 | GACCAGGUGUCUAGAGGCAACAG  | 6  | antisense | 30726 | (921C) stab05<br>ADORA1:1641L21 siRNA<br>(1623C) stab05 | GuuGccucuAGAcAccuGGTsT  | 207 |
|   | ADORA<br>1 | 1819 | GGACCAAGCUUAAAGGAGAGGAGA | 7  | antisense | 30727 | ADORA1:1839L21 siRNA<br>(1821C) stab05                  | uccucuccuuAAGGcuuGGuTsT | 208 |
|   | ADORA<br>1 | 2773 | GUCGGUUGACCUUCUGAACAUAGA | 8  | antisense | 30728 | ADORA1:2793L21 siRNA<br>(2775C) stab05                  | AuGuuAcGAAGGucAAccGTsT  | 209 |
|   | ADORA<br>1 | 919  | AGUUCGAGAAAGGUCAUCAGCAUG | 5  | sense     | 31041 | ADORA1:921U21 siRNA                                     | UUCGAGAAAGGUCAUCAGCAATT | 210 |
|   | ADORA<br>1 | 1621 | GACCAGGUGUCUAGAGGCAACAG  | 6  | sense     | 31042 | ADORA1:1623U21 siRNA                                    | CCAGGUGUCUAGAGGCAACTT   | 211 |
|   | ADORA<br>1 | 1819 | GGACCAAGCUUAAAGGAGAGGAGA | 7  | sense     | 31043 | ADORA1:1821U21 siRNA                                    | ACCAAGCUUAAAGGAGAGGATT  | 212 |
|   | ADORA<br>1 | 2773 | GUCGGUUGACCUUCUGAACAUAGA | 8  | sense     | 31044 | ADORA1:2775U21 siRNA                                    | CGGUUGACCUUCUGAACAUUTT  | 213 |
|   | ADORA<br>1 | 919  | AGUUCGAGAAAGGUCAUCAGCAUG | 5  | antisense | 31117 | ADORA1:939L21 siRNA<br>(921C)                           | UGCUGAUGACCUUCUCGAAATT  | 214 |
|   | ADORA<br>1 | 1621 | GACCAGGUGUCUAGAGGCAACAG  | 6  | antisense | 31118 | ADORA1:1641L21 siRNA<br>(1623C)                         | GUUGCCUCUAGACACCUGGTT   | 215 |
|   | ADORA<br>1 | 1819 | GGACCAAGCUUAAAGGAGAGGAGA | 7  | antisense | 31119 | ADORA1:1839L21 siRNA<br>(1821C)                         | UCCUCUCCUUAAAGCUUGGUTT  | 216 |
|   | ADORA<br>1 | 2773 | GUCGGUUGACCUUCUGAACAUAGA | 8  | antisense | 31120 | ADORA1:2793L21 siRNA<br>(2775C)                         | AUGUUCAGAAAGGUCAACCGTT  | 217 |
|   | b2a2       | 283  | UGACCAUCAUAUAGGAAGGCC    | 9  | sense     | 31594 | b2a2:283U21 siRNA                                       | ACCAUCAUAUAGGAAGAAGTT   | 218 |
|   | b2a2       | 286  | CCAUCAUAUAGGAAGCCCUU     | 10 | sense     | 31595 | b2a2:286U21 siRNA                                       | AUCAUAUAGGAAGAGCCCTT    | 219 |
|   | b2a2       | 282  | CUGACCAUCAUAUAGGAAGAAC   | 11 | sense     | 31596 | b2a2:282U21 siRNA                                       | GACCAUCAUAUAGGAAGAATT   | 220 |
|   | b2a2       | 290  | CAUAAGGAAGGAAGCCCUUCAGC  | 12 | sense     | 31597 | b2a2:290U21 siRNA                                       | AUAAGGAAGGAAGCCCUUCAATT | 221 |
|   | b2a2       | 301  | UGACCAUCAUAUAGGAAGGCC    | 9  | antisense | 31598 | b2a2:301L21 siRNA<br>(283C)                             | CUUCUCCUUUAUUGAUGGUTT   | 222 |
|   | b2a2       | 304  | CCAUCAUAUAGGAAGCCCUU     | 10 | antisense | 31599 | b2a2:304L21 siRNA<br>(286C)                             | GGGCUUCUUCUUUAUUGAUAUTT | 223 |
|   | b2a2       | 300  | CUGACCAUCAUAUAGGAAGAAC   | 11 | antisense | 31600 | b2a2:300L21 siRNA<br>(282C)                             | UUCUCCUUUAUUGAUGGUCTT   | 224 |
|   | b2a2       | 308  | CAUAAGGAAGGAAGCCCUUCAGC  | 12 | antisense | 31601 | b2a2:308L21 siRNA<br>(290C)                             | UGAAGGGCUUCUUCUUUAUUTT  | 225 |
|   | b3a2       | 356  | UGGAUUUAAGCAGAGUUCAAAAG  | 13 | sense     | 31602 | b3a2:356U21 siRNA                                       | GAUUUAAGCAGAGUUCAAAATT  | 226 |
|   | b3a2       | 365  | GCAGAGUUCAAAAGCCCUUCAGC  | 14 | sense     | 31603 | b3a2:365U21 siRNA                                       | AGAGUUCAAAAGCCCUUCATT   | 227 |
|   | b3a2       | 364  | AGCAGAGUUCAAAAGCCCUUCAG  | 15 | sense     | 31604 | b3a2:364U21 siRNA                                       | CAGAGUUCAAAAGCCCUUCATT  | 228 |
|   | b3a2       | 357  | GGAUUUUAAGCAGAGUUCAAAAGC | 16 | sense     | 31605 | b3a2:357U21 siRNA                                       | AUUUAAGCAGAGUUCAAAATT   | 229 |
|   | b3a2       | 374  | UGGAUUUAAGCAGAGUUCAAAAG  | 13 | antisense | 31606 | b3a2:374L21 siRNA<br>(356C)                             | UUUGAACUCUCUGCUUAAAUCTT | 230 |

|      |      |                          |    |           |       |  |                            |     |
|------|------|--------------------------|----|-----------|-------|--|----------------------------|-----|
| b3a2 | 383  | GCAGAGUUCAAAAGCCCUUCAGC  | 14 | antisense | 31607 | b3a2:383L21 siRNA<br>(369C)              | UGAAGGGCUUUUGAACUCUUTT     | 231 |
| b3a2 | 382  | AGCAGAGUUCAAAAGCCCUUCAG  | 15 | antisense | 31608 | b3a2:382L21 siRNA<br>(364C)              | GAAGGGCUUUUGAACUCUGTT      | 232 |
| b3a2 | 375  | GGAUUUAGCAGAGUUCAAAAGC   | 16 | antisense | 31609 | b3a2:375L21 siRNA<br>(357C)              | UUUUGAACUCUCUGCUUAAAUTT    | 233 |
| BACE | 1490 | AUUGGGUGAGGUUACCAACCAGU  | 17 | sense     | 30729 | BACE:1492U21 siRNA<br>stab04             | B uGGGuGAGGuuAccAAccATT B  | 234 |
| BACE | 1753 | UCACCUUGGACAUUGGAAGACUGU | 18 | sense     | 30730 | BACE:1755U21 siRNA<br>stab04             | B AccuuGGACAuGGAAGACuTT B  | 235 |
| BACE | 3583 | UAUGGGACCUUGCUAAGUGUGGAA | 19 | sense     | 30732 | BACE:3585U21 siRNA<br>stab04             | B uGGGAccuGcuAAGGuGuGGTT B | 236 |
| BACE | 1490 | AUUGGGUGAGGUUACCAACCAGU  | 17 | antisense | 30733 | BACE:1510L21 siRNA<br>(1492C) stab05     | uGGuuGGuAAccuAcAATsT       | 237 |
| BACE | 1753 | UCACCUUGGACAUUGGAAGACUGU | 18 | antisense | 30734 | BACE:1773L21 siRNA<br>(1755C) stab05     | AGucuuAcuGuccAAGGuTsT      | 238 |
| BACE | 3583 | UAUGGGACCUUGCUAAGUGUGGAA | 19 | antisense | 30736 | BACE:3603L21 siRNA<br>(3585C) stab05     | ccAcAuuAGcAGGucccATsT      | 239 |
| BACE | 1490 | AUUGGGUGAGGUUACCAACCAGU  | 17 | sense     | 31005 | BACE:1492U21 siRNA                       | UGGGUGAGGUUACCAACCATT      | 240 |
| BACE | 1753 | UCACCUUGGACAUUGGAAGACUGU | 18 | sense     | 31006 | BACE:1755U21 siRNA                       | ACCUUGGACAUUGGAAGACUTT     | 241 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | sense     | 31007 | BACE:2459U21 siRNA                       | UAACAUUGGUGCAAAGAUUTT      | 242 |
| BACE | 3583 | UAUGGGACCUUGCUAAGUGUGGAA | 19 | sense     | 31008 | BACE:3585U21 siRNA                       | UGGGACCUUGCUAAGUGUGGTT     | 243 |
| BACE | 1490 | AUUGGGUGAGGUUACCAACCAGU  | 17 | antisense | 31081 | BACE:1510L21 siRNA<br>(1492C)            | UGGUUGGUAAACCUACCCATT      | 244 |
| BACE | 1753 | UCACCUUGGACAUUGGAAGACUGU | 18 | antisense | 31082 | BACE:1773L21 siRNA<br>(1755C)            | AGUCUUCCAUGUCCAAGGUTT      | 245 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | antisense | 31083 | BACE:2477L21 siRNA<br>(2459C)            | AAUCUUUGCACCACCAUUGUATT    | 246 |
| BACE | 3583 | UAUGGGACCUUGCUAAGUGUGGAA | 19 | antisense | 31084 | BACE:3603L21 siRNA<br>(3585C)            | CCACACUUAGCAGGUGCCCAT      | 247 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | sense     | 31378 | BACE:2459U21 siRNA<br>stab04             | B uAAcAuuGGuGcAAAAGAuTT B  | 248 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | antisense | 31381 | BACE:2477L21 siRNA<br>(2459C) stab05     | AAucuuuGcAccAAuGuuATsT     | 249 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | sense     | 31384 | BACE:2459U21 siRNA<br>stab07             | B uAAcAuuGGuGcAAAAGAuTT B  | 250 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | antisense | 31387 | BACE:2477L21 siRNA<br>(2459C) stab11     | AAucuuuGcAccAAuGuuATsT     | 251 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | sense     | 31390 | BACE:2459U21 siRNA inv<br>stab04         | B uuAGAAAcGuGGuAaAAuTT B   | 252 |
| BACE | 2457 | CCUAAAUUGGUGCAAAGAUUGC   | 20 | antisense | 31393 | BACE:2477L21 siRNA<br>(2459C) inv stab05 | AuuGuAAAcAcGuuucAAATsT     | 253 |

|      |      |                          |    |           |       |  |                             |     |
|------|------|--------------------------|----|-----------|-------|--|-----------------------------|-----|
| BACE | 2457 | CCUAAACAUUGGUGCAAAGAUUGC | 20 | sense     | 31396 | BACE:2459U21 siRNA inv<br>stab07         | B uuAGAAAcGuGGuuAcAAUtt B   | 254 |
| BACE | 2457 | CCUAAACAUUGGUGCAAAGAUUGC | 20 | antisense | 31399 | BACE:2477L21 siRNA<br>(2459C) inv stab11 | AuuGuAAccAcGuuucuAAATsT     | 255 |
| BCL2 | 2098 | UGGCUGUCUCUGAAGACUCUGCU  | 21 | sense     | 30737 | BCL2:2100U21 siRNA<br>stab04             | B GcuGucucuuGAAAGAcucuGTT B | 256 |
| BCL2 | 4426 | CUUACGUGGCCUGUUUCAACAC   | 22 | sense     | 30739 | BCL2:4428U21 siRNA<br>stab04             | B uuAcGuGGccuGuuucAAcTT B   | 257 |
| BCL2 | 6231 | AGUUUGGAUCAGGGAGUUGGAAG  | 23 | sense     | 30740 | BCL2:6233U21 siRNA<br>stab04             | B uuGGAuACGGGAGuuGGATT B    | 258 |
| BCL2 | 2098 | UGGCUGUCUCUGAAGACUCUGCU  | 21 | antisense | 30741 | BCL2:2118L21 siRNA<br>(2100C) stab05     | cAGAGucuuAcAGAGAcAGcTsT     | 259 |
| BCL2 | 4426 | CUUACGUGGCCUGUUUCAACAC   | 22 | antisense | 30743 | BCL2:4446L21 siRNA<br>(4428C) stab05     | GuuGAAAcAGGccAcGuAAATsT     | 260 |
| BCL2 | 6231 | AGUUUGGAUCAGGGAGUUGGAAG  | 23 | antisense | 30744 | BCL2:6251L21 siRNA<br>(6233C) stab05     | uccAAcuccuuGAuccAAATsT      | 261 |
| BCL2 | 2098 | UGGCUGUCUCUGAAGACUCUGCU  | 21 | sense     | 30997 | BCL2:2100U21 siRNA                       | GCUGUCUCUGAAGACUCUGTT       | 262 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | sense     | 30998 | BCL2:3222U21 siRNA                       | GGGAUGAUCACAGGGUAGTT        | 263 |
| BCL2 | 4426 | CUUACGUGGCCUGUUUCAACAC   | 22 | sense     | 30999 | BCL2:4428U21 siRNA                       | UUACGUGGCCUGUUUCAACTT       | 264 |
| BCL2 | 6231 | AGUUUGGAUCAGGGAGUUGGAAG  | 23 | sense     | 31000 | BCL2:6233U21 siRNA                       | UUUGGAUCAGGGAGUUGGATT       | 265 |
| BCL2 | 2098 | UGGCUGUCUCUGAAGACUCUGCU  | 21 | antisense | 31073 | BCL2:2118L21 siRNA<br>(2100C)            | CAGAGUCUUCAGAGACAGCCTT      | 266 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | antisense | 31074 | BCL2:3240L21 siRNA<br>(3222C)            | CUACCCUGUUGAUCAUCCCTT       | 267 |
| BCL2 | 4426 | CUUACGUGGCCUGUUUCAACAC   | 22 | antisense | 31075 | BCL2:4446L21 siRNA<br>(4428C)            | GUUGAAAcAGGCCcACGUAAAT      | 268 |
| BCL2 | 6231 | AGUUUGGAUCAGGGAGUUGGAAG  | 23 | antisense | 31076 | BCL2:6251L21 siRNA<br>(6233C)            | UCCAACUCCUGAUCCAAAT         | 269 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | sense     | 31368 | BCL2:3222U21 siRNA<br>stab04             | B GGGAGuAucAAcAGGGuAGTT B   | 270 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | antisense | 31369 | BCL2:3240L21 siRNA<br>(3222C) stab05     | cuAcccuGuuGAucAucccTsT      | 271 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | sense     | 31370 | BCL2:3222U21 siRNA inv<br>stab04         | B GAuGGGAcAAcuAGuAGGGTT B   | 272 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | antisense | 31371 | BCL2:3240L21 siRNA<br>(3222C) inv stab05 | cccuAcuAGuuGucccAucTsT      | 273 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | sense     | 31372 | BCL2:3222U21 siRNA<br>stab07             | B GGGAGuAucAAcAGGGuAGTT B   | 274 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | antisense | 31373 | BCL2:3240L21 siRNA<br>(3222C) stab11     | cuAcccuGuuGAucAucccTsT      | 275 |
| BCL2 | 3220 | CAGGGAUGAUCACAGGGUAGUG   | 24 | sense     | 31374 | BCL2:3222U21 siRNA inv<br>stab07         | B GAuGGGAcAAcuAGuAGGGTT B   | 276 |

|       |      |                           |    |           |       |  |                            |     |
|-------|------|---------------------------|----|-----------|-------|--|----------------------------|-----|
| BCL2  | 3220 | CAGGGAUGAUAACAACAGGGUAGUG | 24 | antisense | 31375 | BCL2:3240L21 siRNA<br>(3222C) inv stab11 | cccuAcuAGuuGucccAucTsT     | 277 |
| CCND1 | 1628 | GCUGUAGUGGGGUUCUAGGCAUC   | 25 | sense     | 30746 | CCND1:1628U21 siRNA<br>stab04            | B uGuAGuGGGGuuucuAGGcATT B | 278 |
| CCND1 | 2617 | ACACACAAACCUUCUGCCUUUGA   | 26 | sense     | 30747 | CCND1:2617U21 siRNA<br>stab04            | B ACACAAACcuucuGccuuuTT B  | 279 |
| CCND1 | 3124 | UCACAUUGUUUGCUGCUAUUGGA   | 27 | sense     | 30748 | CCND1:3124U21 siRNA<br>stab04            | B ACuuuGuuuGcuGcuAuuGTT B  | 280 |
| CCND1 | 1646 | GCUGUAGUGGGGUUCUAGGCAUC   | 25 | antisense | 30750 | CCND1:1646L21 siRNA<br>(1628C) stab05    | uGccuAGAAccccAcuAcTsT      | 281 |
| CCND1 | 2635 | ACACACAAACCUUCUGCCUUUGA   | 26 | antisense | 30751 | CCND1:2635L21 siRNA<br>(2617C) stab05    | AAAGGcAGAAAGGuuuGuGuTsT    | 282 |
| CCND1 | 3142 | UCACAUUGUUUGCUGCUAUUGGA   | 27 | antisense | 30752 | CCND1:3142L21 siRNA<br>(3124C) stab05    | cAAuAGcAGcAAAcAAuGuTsT     | 283 |
| CCND1 | 695  | GAACACUUCUCCUCCAAAAUGCC   | 28 | sense     | 31009 | CCND1:695U21 siRNA                       | ACACUUCUCCUCCAAAAUGTT      | 284 |
| CCND1 | 1628 | GCUGUAGUGGGGUUCUAGGCAUC   | 25 | sense     | 31010 | CCND1:1628U21 siRNA                      | UGUAGUGGGGUUCUAGGcATT      | 285 |
| CCND1 | 2617 | ACACACAAACCUUCUGCCUUUGA   | 26 | sense     | 31011 | CCND1:2617U21 siRNA                      | ACACAAACCUUCUGCCUUUTT      | 286 |
| CCND1 | 3124 | UCACAUUGUUUGCUGCUAUUGGA   | 27 | sense     | 31012 | CCND1:3124U21 siRNA                      | ACAUUGUUUGCUGCUAUUGTT      | 287 |
| CCND1 | 713  | GAACACUUCUCCUCCAAAAUGCC   | 28 | antisense | 31085 | CCND1:713L21 siRNA<br>(695C)             | CAUUUUGGAGAGGAAGUGUTT      | 288 |
| CCND1 | 1646 | GCUGUAGUGGGGUUCUAGGCAUC   | 25 | antisense | 31086 | CCND1:1646L21 siRNA<br>(1628C)           | UGCCUAGAAACCCcCACUAcATT    | 289 |
| CCND1 | 2635 | ACACACAAACCUUCUGCCUUUGA   | 26 | antisense | 31087 | CCND1:2635L21 siRNA<br>(2617C)           | AAAGGcAGAAAGGUUUUGUGUTT    | 290 |
| CCND1 | 3142 | UCACAUUGUUUGCUGCUAUUGGA   | 27 | antisense | 31088 | CCND1:3142L21 siRNA<br>(3124C)           | CAAUAGcAGcAAAcAAuGuTT      | 291 |
| CCND1 | 695  | GAACACUUCUCCUCCAAAAUGCC   | 28 | sense     | 31304 | CCND1:695U21 siRNA<br>stab04             | B ACuucuccuccAAAAuGTT B    | 292 |
| CCND1 | 695  | GAACACUUCUCCUCCAAAAUGCC   | 28 | sense     | 31304 | CCND1:695U21 siRNA<br>stab04             | B ACuucuccuccAAAAuGTT B    | 292 |
| CCND1 | 695  | GAACACUUCUCCUCCAAAAUGCC   | 28 | sense     | 31304 | CCND1:695U21 siRNA<br>stab04             | B ACuucuccuccAAAAuGTT B    | 292 |
| CCND1 | 713  | GAACACUUCUCCUCCAAAAUGCC   | 28 | antisense | 31305 | CCND1:713L21 siRNA<br>(695C) stab05      | cAuuuuGGAGAGGAAGGuGuTsT    | 293 |
| CCND1 | 713  | GAACACUUCUCCUCCAAAAUGCC   | 28 | antisense | 31305 | CCND1:713L21 siRNA<br>(695C) stab05      | cAuuuuGGAGAGGAAGGuGuTsT    | 293 |
| CCND1 | 695  | GAACACUUCUCCUCCAAAAUGCC   | 28 | sense     | 31316 | CCND1:695U21 siRNA<br>inv stab04         | B GuAAAAAccuccuccAcATT B   | 294 |
| CCND1 | 713  | GAACACUUCUCCUCCAAAAUGCC   | 28 | antisense | 31317 | CCND1:713L21 siRNA<br>(695C) inv stab05  | uGuGAAGGAGAGGGuuuAcTsT     | 295 |
| CDK2  | 344  | CUGGACACUGAGACUGAGGGUGU   | 29 | sense     | 31565 | CDK2:344U21 siRNA                        | GGACACUGAGACUGAGGGGUTT     | 296 |

|       |      |                           |    |           |       |                                       |                              |     |
|-------|------|---------------------------|----|-----------|-------|---------------------------------------|------------------------------|-----|
| CDK2  | 654  | CCAUCAAAGCUAGCAGACUUUGGA  | 30 | sense     | 31566 | CDK2:654U21 siRNA                     | AUCAAGCUAGCAGACUUUGTT        | 297 |
| CDK2  | 1245 | CACUCACCUUCUAGUCUUGGCCA   | 31 | sense     | 31567 | CDK2:1245U21 siRNA                    | CUCACCUUCUAGUCUUGGCCTT       | 298 |
| CDK2  | 1428 | ACACGUUAGAUUUGCCGUACCAA   | 32 | sense     | 31568 | CDK2:1428U21 siRNA                    | ACGUUAGAUUUGCCGUACCTT        | 299 |
| CDK2  | 362  | CUGGACACUGAGACUGAGGGUGU   | 29 | antisense | 31569 | CDK2:362L21 siRNA<br>(344C)           | ACCCUAGUCUCAGUGUCCTT         | 300 |
| CDK2  | 672  | CCAUCAAAGCUAGCAGACUUUGGA  | 30 | antisense | 31570 | CDK2:672L21 siRNA<br>(654C)           | CAAAGUCUGCUAGCUUGAUTT        | 301 |
| CDK2  | 1263 | CACUCACCUUCUAGUCUUGGCCA   | 31 | antisense | 31571 | CDK2:1263L21 siRNA<br>(1245C)         | GCCAAGACUAGAAGGUGAGTT        | 302 |
| CDK2  | 1446 | ACAGUUAGAUUUGCCGUACCAA    | 32 | antisense | 31572 | CDK2:1446L21 siRNA<br>(1428C)         | GGUACGGCAAAUCUAACGUTT        | 303 |
| CHEK1 | 369  | UAUGGUCACAGGAGAGAAAGGCAA  | 33 | sense     | 30753 | CHEK1:371U21 siRNA<br>stab04          | B uGGucAcAGGAGAGAAAGGcTT B   | 304 |
| CHEK1 | 1349 | UGAGAAGUUGGCCUAUCAAUUGGA  | 34 | sense     | 30754 | CHEK1:1351U21 siRNA<br>stab04         | B AGAAGuuGGGcuAuccAAuGTT B   | 305 |
| CHEK1 | 1878 | GUUUCAGGGGACAUAGAGUUUUUCC | 35 | sense     | 30756 | CHEK1:1880U21 siRNA<br>stab04         | B uuAGGGGAcAuGAGuuuuTT B     | 306 |
| CHEK1 | 369  | UAUGGUCACAGGAGAGAAAGGCAA  | 33 | antisense | 30757 | CHEK1:389L21 siRNA<br>(371C) stab05   | GccuucucuccuGuGAccATsT       | 307 |
| CHEK1 | 1349 | UGAGAAGUUGGCCUAUCAAUUGGA  | 34 | antisense | 30758 | CHEK1:1369L21 siRNA<br>(1351C) stab05 | cAuUGAuAGcccAAcuucutTsT      | 308 |
| CHEK1 | 1878 | GUUUCAGGGGACAUAGAGUUUUUCC | 35 | antisense | 30760 | CHEK1:1898L21 siRNA<br>(1880C) stab05 | AAAAcucAuGuccccuGAATsT       | 309 |
| CHEK1 | 369  | UAUGGUCACAGGAGAGAAAGGCAA  | 33 | sense     | 31001 | CHEK1:371U21 siRNA                    | UGGUCACAGGAGAGAAAGGCTT       | 310 |
| CHEK1 | 1349 | UGAGAAGUUGGCCUAUCAAUUGGA  | 34 | sense     | 31002 | CHEK1:1351U21 siRNA                   | AGAAGUUGGGCUAUCAAUGTT        | 311 |
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA   | 36 | sense     | 31003 | CHEK1:1492U21 siRNA                   | AGGGUGAUGGAUUGGAGUUUTT       | 312 |
| CHEK1 | 1878 | GUUUCAGGGGACAUAGAGUUUUUCC | 35 | sense     | 31004 | CHEK1:1880U21 siRNA                   | UUCAGGGGACAUAGAGUUUUUTT      | 313 |
| CHEK1 | 369  | UAUGGUCACAGGAGAGAAAGGCAA  | 33 | antisense | 31077 | CHEK1:389L21 siRNA<br>(371C)          | GCCUUCUCUCCUGUGACCATT        | 314 |
| CHEK1 | 1349 | UGAGAAGUUGGCCUAUCAAUUGGA  | 34 | antisense | 31078 | CHEK1:1369L21 siRNA<br>(1351C)        | CAUUGAUAGCCCCAACUUCUTT       | 315 |
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA   | 36 | antisense | 31079 | CHEK1:1510L21 siRNA<br>(1492C)        | AACUCCAUAUCCAUCACCCUTT       | 316 |
| CHEK1 | 1878 | GUUUCAGGGGACAUAGAGUUUUUCC | 35 | antisense | 31080 | CHEK1:1898L21 siRNA<br>(1880C)        | AAAACUCAUGUCCCCUGAAATT       | 317 |
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA   | 36 | sense     | 31302 | CHEK1:1492U21 siRNA<br>stab04         | B AGGGGuGAGGAAuuGGAGuuTT B   | 318 |
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA   | 36 | antisense | 31303 | CHEK1:1510L21 siRNA<br>(1492C) stab05 | AAcuccAAuccAuccAuccuTsT      | 319 |
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA   | 36 | sense     | 31314 | CHEK1:1492U21 siRNA<br>inv stab04     | B uuGAGGGuuAGGGuAGuGGGGATT B | 320 |

|       |      |                         |    |           |       |  |                             |     |
|-------|------|-------------------------|----|-----------|-------|--|-----------------------------|-----|
| CHEK1 | 1490 | UAAGGGUGAUGGAUUGGAGUUUA | 36 | antisense | 31315 | CHEK1:1510L21 siRNA (1492C) inv stab05                                       | uccAcuAccuAAccucAATsT       | 321 |
| EGFR  | 3828 | UAACCCUGUACUGGUGCCU     | 37 | sense     | 25227 | RPI 21550 EGFR 3830L23 AS as siRNA Str 1 (sense)                             | B UAACCCUGUACUGGUGCCUCC B   | 322 |
| EGFR  |      | ACCUCGUACUGGUGCCUCC     | 38 | antisense | 25228 | RPI 21550 EGFR 3830L23 AS as siRNA Str 2 (antisense)                         | B GGAGGCACCAGUACGAGGUUA B   | 323 |
| EGFR  |      | AUUGGGGAUCUUGGAGUUU     | 39 | antisense | 25229 | RPI 21549 EGFR as siRNA Str 2 (antisense)                                    | B AAACUCCAAGAUCGCCCAAUCA B  | 324 |
| EGFR  |      | UGAUUGGGGAUCUUGGAGU     | 40 | sense     | 25230 | RPI 21549 EGFR 3 as siRNA Str 1 (sense)                                      | B UGAUUGGGGAUCUUGGAGUUU B   | 325 |
| EGFR  |      | GAAAUACACAGGGUUUUUGC    | 41 | antisense | 25233 | RPI 21545 EGFR as siRNA Str 2 (antisense)                                    | B GCAAAAACCCUGUGAUUUUCCU B  | 326 |
| EGFR  |      | AGGAAAUACACAGGGUUUUU    | 42 | sense     | 25234 | RPI 21545 EGFR as siRNA Str 1 (sense)  | B AGGAAAUACACAGGGUUUUUUGC B | 327 |
| EGFR  |      | ACUGCCAGAAACUGACCAA     | 43 | antisense | 25235 | RPI 21543 EGFR as siRNA Str 2 (antisense)                                    | B UUGGUCAGUUUCUGGCAGUUC B   | 328 |
| EGFR  |      | GAACUGCCAGAAACUGACC     | 44 | sense     | 25236 | RPI 21543 EGFR as siRNA Str 1 (sense)  | B GAACUGCCAGAAACUGACCAA B   | 329 |
| EGFR  | 3828 | ACCUCGUACUGGUGCCUCC     | 38 | sense     | 25249 | RPI 21550 EGFR 3830L23 AS as siRNA Str 1 (sense) Inverted Control            | B CCUCCGUGGUGAUGCUCCAAU B   | 330 |
| EGFR  | 3828 | AGGCACCAGUACGAGGUUA     | 45 | sense     | 25250 | RPI 21550 EGFR 3830L23 AS as siRNA Str 1 (sense) Inverted Control Complement | B AUUGGAGCAUGACCACGGAGG B   | 331 |
| EGFR  | 3828 | UAACCCUGUACUGGUGCCU     | 37 | sense     | 25804 | RPI 21550 EGFR 3830L23 AS as siRNA Str 1 (sense) +2U overhang                | UAACCCUGUACUGGUGCCUCCUU     | 332 |
| EGFR  |      | ACCUCGUACUGGUGCCUCC     | 38 | antisense | 25805 | RPI 21550 EGFR 3830L23 AS as siRNA Str 2 (antisense) +2U overhang            | GGAGGCACCAGUACGAGGUUAUU     | 333 |
| EGFR  |      | AUUGGGGAUCUUGGAGUUU     | 39 | antisense | 25806 | RPI 21549 EGFR as siRNA Str 2 (antisense)+2U overhang                        | AAACUCCAAGAUCGCCCAAUCAU     | 334 |
| EGFR  |      | UGAUUGGGGAUCUUGGAGU     | 40 | sense     | 25807 | RPI 21549 EGFR 3 as siRNA Str 1 (sense)+2U overhang                          | UGAUUGGGGAUCUUGGAGUUUUU     | 335 |
| EGFR  |      | GAAAUACACAGGGUUUUUGC    | 41 | antisense | 25810 | RPI 21545 EGFR as siRNA Str 2  | GCAAAAACCCUGUGAUUUUCCUUU    | 336 |



|      |      |                     |    |           |       |  |                               |     |
|------|------|---------------------|----|-----------|-------|--|-------------------------------|-----|
| EGFR |      | AGGAAAUACAGGGUUUUU  | 42 | sense     | 25811 | (antisense)+2U overhang<br>RPI 21545 EGFR as<br>siRNA Str 1 (sense)+2U<br>overhang | AGGAAAUACAGGGUUUUUGCUU        | 337 |
| EGFR |      | ACUGCCAGAAACUGACCAA | 43 | antisense | 25812 | RPI 21543 EGFR as<br>siRNA Str 2<br>(antisense)+2U overhang                        | UUGGUCAGUUUCUGGCAGUUCUU       | 338 |
| EGFR |      | GAACUGCCAGAAACUGACC | 44 | sense     | 25813 | RPI 21543 EGFR as<br>siRNA Str 1 (sense)+2U<br>overhang                            | GAACUGCCAGAAACUGACCAUU        | 339 |
| EGFR | 3828 | UAACCUUGUACUGGUGCCU | 37 | sense     | 25824 | RPI 21550 EGFR<br>3830L23 AS as siRNA Str<br>1 (sense) +2U overhang                | B UAACCUUGUACUGGUGCCUCCUU B   | 340 |
| EGFR |      | ACCUCGUACUGGUGCCUCC | 38 | antisense | 25825 | RPI 21550 EGFR<br>3830L23 AS as siRNA Str<br>2 (antisense) +2U<br>overhang         | B GGAGGCACCAGUACGAGGUUAUU B   | 341 |
| EGFR |      | AUUGGGGAUCUUGGAGUUU | 39 | antisense | 25826 | RPI 21549 EGFR as<br>siRNA Str 2 (antisense)+<br>2U overhang                       | B AAACUCCAAAGAUCGCCCAAUCAUU B | 342 |
| EGFR |      | UGAUUGGGGAUCUUGGAGU | 40 | sense     | 25827 | RPI 21549 EGFR 3 as<br>siRNA Str 1 (sense)+2U<br>overhang                          | B UGAUUGGGGAUCUUGGAGUUUUU B   | 343 |
| EGFR |      | GAAAUACAGGGUUUUUGC  | 41 | antisense | 25830 | RPI 21545 EGFR as<br>siRNA Str 2<br>(antisense)+2U overhang                        | B GCAAAAACCCUGUGAUUUUCCUUU B  | 344 |
| EGFR |      | AGGAAAUACAGGGUUUUU  | 42 | sense     | 25831 | RPI 21545 EGFR as<br>siRNA Str 1 (sense)+2U<br>overhang                            | B AGGAAAUACAGGGUUUUUUGCUU B   | 345 |
| EGFR |      | ACUGCCAGAAACUGACCAA | 43 | antisense | 25832 | RPI 21543 EGFR as<br>siRNA Str 2<br>(antisense)+2U overhang                        | B UUGGUCAGUUUCUGGCAGUUCUU B   | 346 |
| EGFR |      | GAACUGCCAGAAACUGACC | 44 | sense     | 25833 | RPI 21543 EGFR as<br>siRNA Str 1 (sense)+2U<br>overhang                            | B GAACUGCCAGAAACUGACCAUUU B   | 347 |
| EGFR | 799  | GAACUGCCAGAAACUGACC | 44 | sense     | 30705 | EGFR:801U21 siRNA<br>stab04  | B GAAcuGccAGAAAcuGAccTT B     | 348 |
| EGFR | 1380 | AGGAAAUACAGGGUUUUU  | 42 | sense     | 30706 | EGFR:138U21 siRNA<br>stab04  | B AGGAAAUcAcAGGGuuuuuTT B     | 349 |
| EGFR | 3084 | GUUCCGUGAGUUGAUCAUC | 46 | sense     | 30707 | EGFR:3066U21 siRNA<br>stab04   | B GuuccGuGAGuuGaucAucTT B     | 350 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA | 47 | sense     | 30708 | EGFR:3154U21 siRNA   | B ccaAGuuccuAcAGAcuccATT B    | 351 |

|      |      |                         |    |           |       |  |                            |     |
|------|------|-------------------------|----|-----------|-------|--|----------------------------|-----|
| EGFR | 799  | GAACUGCCAGAAACUGACC     | 44 | antisense | 30709 | stab04<br>EGFR:819L21 siRNA<br>(801C) stab05 | GGuAGuuccuGGcAGuucTsT      | 352 |
| EGFR | 1380 | AGGAAAUACACAGGGUUUUU    | 42 | antisense | 30710 | EGFR:1400L21 siRNA<br>(1382C) stab05         | AAAAAcccuGuGAuuuccuTsT     | 353 |
| EGFR | 3064 | GUUCCGUGAGUUUGAUCauc    | 46 | antisense | 30711 | EGFR:3084L21 siRNA<br>(3066C) stab05         | GAUGAuAACucAcGGAAcTsT      | 354 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | antisense | 30712 | EGFR:3172L21 siRNA<br>(3154C) stab05         | uGGAGucuGuAGGAcuuGGTsT     | 355 |
| EGFR | 799  | GAACUGCCAGAAACUGACC     | 44 | sense     | 30985 | EGFR:801U21 siRNA                            | GAACUGCCAGAAACUGACCCTT     | 356 |
| EGFR | 1380 | AGGAAAUACACAGGGUUUUU    | 42 | sense     | 30986 | EGFR:1382U21 siRNA                           | AGGAAAUACACAGGGUUUUUTT     | 357 |
| EGFR | 3064 | GUUCCGUGAGUUUGAUCauc    | 46 | sense     | 30987 | EGFR:3066U21 siRNA                           | GUUCCGUGAGUUUGAUCAUCTT     | 358 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | sense     | 30988 | EGFR:3154U21 siRNA                           | CCAAGUCCUACAGACUCCATT      | 359 |
| EGFR | 799  | GAACUGCCAGAAACUGACC     | 44 | antisense | 31061 | EGFR:819L21 siRNA<br>(801C)                  | GGUCAGUUUCUGGCAGUUCCTT     | 360 |
| EGFR | 1380 | AGGAAAUACACAGGGUUUUU    | 42 | antisense | 31062 | EGFR:1400L21 siRNA<br>(1382C)                | AAAAACCCUGUGAUUUUCCUTT     | 361 |
| EGFR | 3064 | GUUCCGUGAGUUUGAUCauc    | 46 | antisense | 31063 | EGFR:3084L21 siRNA<br>(3066C)                | GAUGAUCAACUCACGGAACTT      | 362 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | antisense | 31064 | EGFR:3172L21 siRNA<br>(3154C)                | UGGAGUCUGUAGGACUUGGTT      | 363 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | sense     | 31300 | EGFR:3154U21 siRNA<br>stab04                 | B ccAAGuccuAcAGAcuccATT B  | 351 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | antisense | 31301 | EGFR:3172L21 siRNA<br>(3154C) stab05         | uGGAGucuGuAGGAcuuGGTsT     | 355 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | sense     | 31312 | EGFR:3154U21 siRNA inv<br>stab04             | B AccucAGAcAuccuGAAccTT B  | 364 |
| EGFR | 3152 | CCAAGUCCUACAGACUCCA     | 47 | antisense | 31313 | EGFR:3172L21 siRNA<br>(3154C) inv stab05     | GGuucAGGAUGucuGAGGuTsT     | 365 |
| ERG2 | 242  | AGGUGAAUGGCUCAAGGAACUCU | 48 | sense     | 30761 | ERG2:244U21 siRNA<br>stab04                  | B GuGAAuGGcucAAGGAACuTT B  | 366 |
| ERG2 | 517  | AAGGAACUGUGCAAGAUACCAA  | 49 | sense     | 30762 | ERG2:519U21 siRNA<br>stab04                  | B GGAAcuGuGcAAGAUAGaccTT B | 367 |
| ERG2 | 759  | GAAAGCUGCUCACCAUCUCCUU  | 50 | sense     | 30763 | ERG2:761U21 siRNA<br>stab04                  | B AAGcuGcuCAAccAucccTT B   | 368 |
| ERG2 | 767  | CUCAACCAUCUCCUCCACAGUG  | 51 | sense     | 30764 | ERG2:769U21 siRNA<br>stab04                  | B cAAccAuccuccuuccAcAGTT B | 369 |
| ERG2 | 242  | AGGUGAAUGGCUCAAGGAACUCU | 48 | antisense | 30765 | ERG2:262L21 siRNA<br>(244C) stab05           | AGuuccuuGAGccAuucAcTsT     | 370 |
| ERG2 | 517  | AAGGAACUGUGCAAGAUACCAA  | 49 | antisense | 30766 | ERG2:537L21 siRNA<br>(519C) stab05           | GGucAuccuGcAcAGuuccTsT     | 371 |

|      |      |                            |    |           |       |                                      |                              |     |
|------|------|----------------------------|----|-----------|-------|--------------------------------------|------------------------------|-----|
| ERG2 | 759  | GAAAGCUGCUCUACAACCAUCUCCUU | 50 | antisense | 30767 | ERG2:779L21 siRNA<br>(761C) stab05   | GGAGAuGGuuGAGcAGcAuTsT       | 372 |
| ERG2 | 767  | CUCAACCAUCUCUCCUCCACAGUG   | 51 | antisense | 30768 | ERG2:787L21 siRNA<br>(769C) stab05   | cuGuGGAAGGAGAGuGGuuGTsT      | 373 |
| ERG2 | 242  | AGGUGAAUGGCUCUAAAGGAACUCU  | 48 | sense     | 31045 | ERG2:244U21 siRNA                    | GUGAAUGGCUCUAAAGGAACUTT      | 374 |
| ERG2 | 517  | AAGGAACUGUGCAAGAGUACCAA    | 49 | sense     | 31046 | ERG2:519U21 siRNA                    | GGAACUGUGCAAGAGUACCTT        | 375 |
| ERG2 | 759  | GAAAGCUGCUCUACAACCAUCUCCUU | 50 | sense     | 31047 | ERG2:761U21 siRNA                    | AAGCUGCUCUACAACCAUCUCTT      | 376 |
| ERG2 | 767  | CUCAACCAUCUCCUCCACAGUG     | 51 | sense     | 31048 | ERG2:769U21 siRNA                    | CAACCAUCUCCUCCACAGTT         | 377 |
| ERG2 | 242  | AGGUGAAUGGCUCUAAAGGAACUCU  | 48 | antisense | 31121 | ERG2:262L21 siRNA<br>(244C)          | AGUUCUUGAGGCCAUUCACIT        | 378 |
| ERG2 | 517  | AAGGAACUGUGCAAGAUACCAA     | 49 | antisense | 31122 | ERG2:537L21 siRNA<br>(519C)          | GGUCAUCUUGCACAGUUCCTT        | 379 |
| ERG2 | 759  | GAAAGCUGCUCUACAACCAUCUCCUU | 50 | antisense | 31123 | ERG2:779L21 siRNA<br>(761C)          | GGAGUUGGUUGAGCAGCUUTT        | 380 |
| ERG2 | 767  | CUCAACCAUCUCUCCUCCACAGUG   | 51 | antisense | 31124 | ERG2:787L21 siRNA<br>(769C)          | CUGUGGAAGGAGAUUGGUUTT        | 381 |
| EZH2 | 201  | UACAUGCGACUGAGACAGCUCAA    | 52 | sense     | 31416 | EZH2:203U21 siRNA                    | CAUGCGACUGAGACAGCUCTT        | 382 |
| EZH2 | 338  | GCACAUCCUGACUUCUGUGAGCU    | 53 | sense     | 31417 | EZH2:340U21 siRNA                    | ACAUCUGACUUCUGUGAGTT         | 383 |
| EZH2 | 688  | ACGAUGAUGAUGAUGGAGACGAU    | 54 | sense     | 31418 | EZH2:690U21 siRNA                    | GAUGAUGAUGAUGGAGACGTT        | 384 |
| EZH2 | 1493 | UGACAAUUUCUGUGCCAUUGCUA    | 55 | sense     | 31419 | EZH2:1495U21 siRNA                   | ACAAUUUCUGUGCCAUUGCTT        | 385 |
| EZH2 | 201  | UACAUGCGACUGAGACAGCUCAA    | 52 | antisense | 31420 | EZH2:221L21 siRNA<br>(203C)          | GAGCUGUCUCAGUCGCAUGTT        | 386 |
| EZH2 | 338  | GCACAUCCUGACUUCUGUGAGCU    | 53 | antisense | 31421 | EZH2:358L21 siRNA<br>(340C)          | CUCACAGAAGUCAGGAUGUTT        | 387 |
| EZH2 | 688  | ACGAUGAUGAUGAUGGAGACGAU    | 54 | antisense | 31422 | EZH2:708L21 siRNA<br>(690C)          | CGUCUCCAUCUCAUCAUCTT         | 388 |
| EZH2 | 1493 | UGACAAUUUCUGUGCCAUUGCUA    | 55 | antisense | 31423 | EZH2:1513L21 siRNA<br>(1495C)        | GCAAUGGCACAGAAAUIUGUTT       | 389 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG    | 56 | sense     | 29694 | FLT1:349U21 siRNA<br>stab01          | CsUsGsAsGsUUUAAAAGGCACCCCTsT | 390 |
| FLT1 | 2338 | AACAACCAACAAAAUACAACAAGA   | 57 | sense     | 29695 | FLT1:2340U21 siRNA<br>stab01         | CsAsAsCsCsACAAAAUACAACAATsT  | 391 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU    | 58 | sense     | 29696 | FLT1:3912U21 siRNA<br>stab01         | CsCsUsGsGsAAAAAGAAUCAAACCTsT | 392 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU    | 59 | sense     | 29697 | FLT1:2949U21 siRNA<br>stab01         | GsCsAsAsGsGAGGGCCUCUGAUGTsT  | 393 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG    | 56 | antisense | 29698 | FLT1:369L21 siRNA<br>(349C) stab01   | GsGsGsUsGsCCUUUUAAACUCAGTsT  | 394 |
| FLT1 | 2338 | AACAACCAACAAAAUACAACAAGA   | 57 | antisense | 29699 | FLT1:2358L21 siRNA<br>(2340C) stab01 | UsUsGsUsUsGUAUUUUUGUGGUUGTsT | 395 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU    | 58 | antisense | 29700 | FLT1:3932L21 siRNA                   | GsGsUsUsUsGUAUUUUUCCAGGTsT   | 396 |

|      |      |                          |    |           |       |  |   |     |
|------|------|--------------------------|----|-----------|-------|--|---|-----|
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 29701 | (3912C) stab01<br>FLT1:2969L21 siRNA<br>(2949C) stab01 | CsAsUsCsAsGAGGCCCUUUGCTsT                   | 397 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | sense     | 29702 | FLT1:349U21 siRNA<br>stab03                            | csusGsAsGuuuAAAAAGGcAcscscTsT               | 398 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 29703 | FLT1:2340U21 siRNA<br>stab03                           | csAsAscsCACAAAAuACAAsAsTsT                  | 399 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 29704 | FLT1:3912U21 siRNA<br>stab03                           | cscsusGsGAAAGAAuCAAAAscsTsT                 | 400 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 29705 | FLT1:2949U21 siRNA<br>stab03                           | GscsAsAsGGAGGccucuGAsusGsTsT                | 401 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | antisense | 29706 | FLT1:369L21 siRNA<br>(349C) stab02                     | GsGsGsUsGsCsCsUsUsUsAsAsAsCsUs              | 402 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 29707 | FLT1:2358L21 siRNA<br>(2340C) stab02                   | UsUsGsUsUsGsUsAsUsUsUsGsUsGsG<br>sUsUsGsTsT | 403 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 29708 | FLT1:3932L21 siRNA<br>(3912C) stab02                   | GsGsUsUsUsGsUsGsUsUsCsUsUsCsCs              | 404 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 29709 | FLT1:2969L21 siRNA<br>(2949C) stab02                   | CsAsUsCsAsGsGsCsCsCsUsCsCsUs<br>AsGsGsTsT   | 405 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 29981 | FLT1:2340U21 siRNA<br>Native                           | UsGsCsTsT<br>CAACCACAAAAUACAACAAGA          | 406 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 29982 | FLT1:2358L21 siRNA<br>(2340C) Native                   | UUGUUGUAUUUUGUGGUUGUU                       | 407 |
| FLT1 | 2340 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 29983 | FLT1:2342U21 siRNA<br>stab01 inv                       | AsAsCsAsAsCAUAAAACACCAACTsT                 | 408 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 29984 | FLT1:2358L21 siRNA<br>(2340C) stab01 inv               | GsUsUsGsGsUGUUUUUAUGUUUUTsT                 | 409 |
| FLT1 | 2340 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 29985 | FLT1:2342U21 siRNA<br>stab03 inv                       | AsAscsAsAcAUAAAACAccAsAscsTsT               | 410 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 29986 | FLT1:2358L21 siRNA<br>(2340C) stab02 inv               | GsUsUsGsGsUsGsUsUsUsUsGsUsUsU<br>sGsUsTsT   | 411 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 29987 | FLT1:2340U21 siRNA inv<br>Native                       | AGAAACAACAUAUAAAACACCAAC                    | 412 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 29988 | FLT1:2358L21 siRNA<br>(2340C) inv Native               | UUGUUGGUGUUUUUAUGUUUGUU                     | 413 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 30075 | FLT1:2340U21 siRNA                                     | CAACCACAAAAUACAACAATT                       | 414 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30076 | FLT1:2358L21 siRNA<br>(2340C)                          | UUGUUGUAUUUUUGUGGUUGTT                      | 415 |
| FLT1 | 2340 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 30077 | FLT1:2342U21 siRNA inv                                 | AGAACAACAUAUAAAACACCACTT                    | 416 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30078 | FLT1:2358L21 siRNA<br>(2340C) inv                      | UUGUUGGUGUUUUUAUGUUUGTT                     | 417 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30187 | FLT1:2358L21 siRNA                                     | uuGuuGuuAuuuuGuGGuuGTT                      | 418 |

|      |      |                          |    |           |       |  |                            |     |
|------|------|--------------------------|----|-----------|-------|--|----------------------------|-----|
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30190 | (2340C) 2'-F U.C                             | uuGuuGuAuuuuGuGGuuGXX      | 419 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30193 | (2340C) nitroindole                          | uuGuuGuAuuuuGuGGuuGZZ      | 420 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | sense     | 30196 | (2340C) nitropropyl                          | B CAACcAcAAAAuAcAAcAAATT B | 421 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | sense     | 30199 | FLT1:2340U21 siRNA<br>sense IB caps w/2'FY's | cAAcAcAAAAuAcAAcAAATT      | 422 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30340 | FLT1:2358L21 siRNA<br>(2340C) 3'dT           | uuGuuGuAuuuuGuGGuuGTX      | 423 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30341 | FLT1:2358L21 siRNA<br>(2340C) glyceryl       | uuGuuGuAuuuuGuGGuuGTX      | 424 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30342 | FLT1:2358L21 siRNA<br>(2340C) 3'OMeU         | uuGuuGuAuuuuGuGGuuGTU      | 425 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30343 | FLT1:2358L21 siRNA<br>(2340C) L-dT           | uuGuuGuAuuuuGuGGuuGTt      | 426 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30344 | FLT1:2358L21 siRNA<br>(2340C) L-rU           | uuGuuGuAuuuuGuGGuuGTu      | 427 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30345 | FLT1:2358L21 siRNA<br>(2340C) idT            | uuGuuGuAuuuuGuGGuuGTD      | 428 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30346 | FLT1:2358L21 siRNA<br>(2340C) 3'dT           | uuGuuGuAuuuuGuGGuuGXT      | 429 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | antisense | 30416 | FLT1:2358L21 siRNA<br>(2340C) TsT            | uuGuuGuAuuuuGuGGuuGTsT     | 430 |
| FLT1 | 1182 | UCGUGUAAGGAGUGGACCAUCAU  | 60 | sense     | 30777 | FLT1:1184U21 siRNA<br>stab04                 | B GuGuAAGGAGuGGAccAucTT B  | 431 |
| FLT1 | 3501 | UUACGGAGUAUUGCUGUGGAAA   | 61 | sense     | 30778 | FLT1:3503U21 siRNA<br>stab04                 | B AcGGAGuAuuGcuGuGGGATT B  | 432 |
| FLT1 | 4713 | UAGCAGGCCUAAAGACAUGUGAGG | 62 | sense     | 30779 | FLT1:4715U21 siRNA<br>stab04                 | B GcAGGccuAAGAcAuGuGATT B  | 433 |
| FLT1 | 4751 | AGCAAAAAGCAAGGGAGAAAAGA  | 63 | sense     | 30780 | FLT1:4753U21 siRNA<br>stab04                 | B CAAAAAGcAAGGGAGAAAAATT B | 434 |
| FLT1 | 1182 | UCGUGUAAGGAGUGGACCAUCAU  | 60 | antisense | 30781 | FLT1:1202L21 siRNA<br>(1184C) stab05         | GAuGGuccAcuccuuAcAcTsT     | 435 |
| FLT1 | 3501 | UUACGGAGUAUUGCUGUGGAAA   | 61 | antisense | 30782 | FLT1:3521L21 siRNA<br>(3503C) stab05         | ucccAcAGcAAuAcuccGuTsT     | 436 |
| FLT1 | 4713 | UAGCAGGCCUAAAGACAUGUGAGG | 62 | antisense | 30783 | FLT1:4733L21 siRNA<br>(4715C) stab05         | ucAcAuGuccuuAGGccuGcTsT    | 437 |
| FLT1 | 4751 | AGCAAAAAGCAAGGGAGAAAAGA  | 63 | antisense | 30784 | FLT1:4771L21 siRNA<br>(4753C) stab05         | uuuuccuccuuGccuuuuGTsT     | 438 |
| FLT1 | 2338 | AACAACGACAAAAUACAACAAGA  | 57 | sense     | 30955 | FLT1:2340U21 siRNA                           | B CAACcAcAAAAuAcAAcAAATT B | 439 |

|      |      |                          |    |           |       |  |                              |     |
|------|------|--------------------------|----|-----------|-------|--|------------------------------|-----|
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30956 | stab07<br>FLT1:2358L21 siRNA<br>(2340C) stab08 | uuGuuGuuAuuuuGuuGuuGTsT      | 440 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 30963 | FLT1:2340U21 siRNA inv                         | AACAACAUAAAAACACCAACTT       | 441 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30964 | FLT1:2358L21 siRNA<br>(2340C) inv              | GUUGGUGUUUUUAUGUUGUUTT       | 442 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 30965 | FLT1:2340U21 siRNA<br>stab04 inv               | B AACAACAUA AAAACACCAcAcTT B | 443 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30966 | FLT1:2358L21 siRNA<br>(2340C) stab05 inv       | GuuGGUGuuuuAuGuuGuuTsT       | 444 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | sense     | 30967 | FLT1:2340U21 siRNA<br>stab07 inv               | B AACAACAUA AAAACACCAcAcTT B | 445 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA | 57 | antisense | 30968 | FLT1:2358L21 siRNA<br>(2340C) stab08 inv       | GuuGGUGuuuuAuGuuGuuTsT       | 446 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | sense     | 31182 | FLT1:349U21 siRNA TT                           | CUGAGUUUAAAAGGCACCCCTT       | 447 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31183 | FLT1:2949U21 siRNA TT                          | GCAAGGAGGGCCUCUGAUGTT        | 448 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31184 | FLT1:3912U21 siRNA TT                          | CCUGGAAAGAAUCAAACCCCTT       | 449 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | antisense | 31185 | FLT1:367L21 siRNA<br>(349C) TT                 | GGGUGCCUUUUAAAACUCAGTT       | 450 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31186 | FLT1:2967L21 siRNA<br>(2949C) TT               | CAUCAGAGGGCCCUCCUUGCTT       | 451 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31187 | FLT1:3930L21 siRNA<br>(3912C) TT               | GGUUUUGAUUUUUUCCAGGTT        | 452 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | sense     | 31188 | FLT1:349U21 siRNA<br>stab04                    | B cuGAGuuuuAAAAGGcAcctTT B   | 453 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31189 | FLT1:2949U21 siRNA<br>stab04                   | B GcAAGGAGGGGccucucUGuGTT B  | 454 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31190 | FLT1:3912U21 siRNA<br>stab04                   | B ccuGGAAAGAAuAAAAccTT B     | 455 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | antisense | 31191 | FLT1:367L21 siRNA<br>(349C) stab05             | GGGuGccuuuuAAAacucAGTsT      | 456 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31192 | FLT1:2967L21 siRNA<br>(2949C) stab05           | cAucAGAGGGccuccuuGcTsT       | 457 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31193 | FLT1:3930L21 siRNA<br>(3912C) stab05           | GGuuuuGAuuuuuuccAGGTsT       | 458 |
| FLT1 | 347  | AACUGAGUUUAAAAGGCACCCAG  | 56 | sense     | 31194 | FLT1:349U21 siRNA<br>stab07                    | B cuGAGuuuuAAAAGGcAcctTT B   | 459 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31195 | FLT1:2949U21 siRNA<br>stab07                   | B GcAAGGAGGGccucucUGuGTT B   | 460 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31196 | FLT1:3912U21 siRNA<br>stab07                   | B ccuGGAAAGAAuAAAAccTT B     | 461 |

|      |      |                          |    |           |       |  |                              |     |
|------|------|--------------------------|----|-----------|-------|--|------------------------------|-----|
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | antisense | 31197 | FLT1:367L21 siRNA<br>(349C) stab08       | GGGuGccuuuuAAAAcucAGTsT      | 462 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31198 | FLT1:2967L21 siRNA<br>(2949C) stab08     | cAucAGAGGccuccuuGcTsT        | 463 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31199 | FLT1:3930L21 siRNA<br>(3912C) stab08     | GGuuuuGAuuccuuuccAGGTsT      | 464 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | sense     | 31200 | FLT1:349U21 siRNA inv<br>TT              | CCCACGGAAAAUUUGAGUC TT       | 465 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31201 | FLT1:2949U21 siRNA inv<br>TT             | GUAGUCUCCGGGAGGAACGTT        | 466 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31202 | FLT1:3912U21 siRNA inv<br>TT             | CCAAAACUAAGAAAGGUCCTT        | 467 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | antisense | 31203 | FLT1:367L21 siRNA<br>(349C) inv TT       | GACUCAAAUUUCCGUGGGTT         | 468 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31204 | FLT1:2967L21 siRNA<br>(2949C) inv TT     | CGUCCUCCCGGAGACUACIT         | 469 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31205 | FLT1:3930L21 siRNA<br>(3912C) inv TT     | GGACCUUUCUUAAGUUUUUGGTT      | 470 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | sense     | 31206 | FLT1:349U21 siRNA<br>stab04 inv          | B cccAcGGAAAAuuuGAGuc TT B   | 471 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31207 | FLT1:2949U21 siRNA<br>stab04 inv         | B GuAGucuccGGGAGGAACGTT B    | 472 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31208 | FLT1:3912U21 siRNA<br>stab04 inv         | B cccAAAAcuAAAGAAAGGucc TT B | 473 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | antisense | 31209 | FLT1:367L21 siRNA<br>(349C) stab05 inv   | GAcucAAAuuuuuccGuGGGTsT      | 474 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31210 | FLT1:2967L21 siRNA<br>(2949C) stab05 inv | cGuuccucccccGGAGAcuAcTsT     | 475 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31211 | FLT1:3930L21 siRNA<br>(3912C) stab05 inv | GGAccuuuucuuAGuuuuGGTsT      | 476 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | sense     | 31212 | FLT1:349U21 siRNA<br>stab07 inv          | B cccAcGGAAAAuuuGAGuc TT B   | 477 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | sense     | 31213 | FLT1:2949U21 siRNA<br>stab07 inv         | B GuAGucuccGGGAGGAACGTT B    | 478 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | sense     | 31214 | FLT1:3912U21 siRNA<br>stab07 inv         | B ccAAAAcuAAAGAAAGGucc TT B  | 479 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG | 56 | antisense | 31215 | FLT1:367L21 siRNA<br>(349C) stab08 inv   | GAcucAAAuuuuuccGuGGGTsT      | 480 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU  | 59 | antisense | 31216 | FLT1:2967L21 siRNA<br>(2949C) stab08 inv | cGuuccucccccGGAGAcuAcTsT     | 481 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU  | 58 | antisense | 31217 | FLT1:3930L21 siRNA<br>(3912C) stab08 inv | GGAccuuuucuuAGuuuuGGTsT      | 482 |

|      |      |                           |    |           |       |  |                             |     |
|------|------|---------------------------|----|-----------|-------|--|-----------------------------|-----|
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG  | 56 | sense     | 31270 | FLT1:349U21 siRNA<br>stab09                  | B CUGAGUUUAAAAAGGCACCCCTT B | 483 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | sense     | 31271 | FLT1:2949U21 siRNA<br>stab09                 | B GCAAGGAGGGCCUCUGAUGTT B   | 484 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU   | 58 | sense     | 31272 | FLT1:3912U21 siRNA<br>stab09                 | B CCUGGAAAGAAUCAAACCCCTT B  | 485 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG  | 56 | antisense | 31273 | FLT1:367L21 siRNA<br>(349C) stab10           | GGGUGCCUUUAAACUCAGTsT       | 486 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | antisense | 31274 | FLT1:2967L21 siRNA<br>(2949C) stab10         | CAUCAGAGGCCCUCCUUGCTsT      | 487 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU   | 58 | antisense | 31275 | FLT1:3930L21 siRNA<br>(3912C) stab10         | GGUUUGAUUCUUUCCAGGTsT       | 488 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG  | 56 | sense     | 31276 | FLT1:349U21 siRNA<br>stab09 inv              | B CCCACGGAAAAUUUGAGUCTT B   | 489 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | sense     | 31277 | FLT1:2949U21 siRNA<br>stab09 inv             | B GUAGUCUCCGGGAGGAACGTT B   | 490 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU   | 58 | sense     | 31278 | FLT1:3912U21 siRNA<br>stab09 inv             | B CCAAAACUAAAGAAAGGUCCCTT B | 491 |
| FLT1 | 347  | AACUGAGUUUAAAAAGGCACCCAG  | 56 | antisense | 31279 | FLT1:367L21 siRNA<br>(349C) stab10 inv       | GACUAAAAUUUCCGUGGGTsT       | 492 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | antisense | 31280 | FLT1:2967L21 siRNA<br>(2949C) stab10 inv     | CGUUCUCCCGGAGACUACTsT       | 493 |
| FLT1 | 3910 | AGCCUGGAAAGAAUCAAACCCUU   | 58 | antisense | 31281 | FLT1:3930L21 siRNA<br>(3912C) stab10 inv     | GGACCUUUCUUAUUUUUGGTsT      | 494 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | antisense | 31424 | FLT1:2358L21 siRNA<br>(2340C) stab11 3'-BrdU | uuGuuGuAuuuuGuGGuuGXsX      | 495 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | antisense | 31425 | FLT1:2967L21 siRNA<br>(2949C) stab11 3'-BrdU | cAucAGAGGccuccuuGcXsX       | 496 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | antisense | 31442 | FLT1:2358L21 siRNA<br>(2340C) stab11 3'-BrdU | uuGuuGuAuuuuGuGguGXsT       | 497 |
| FLT1 | 2947 | AAGCAAGGAGGGCCUCUGAUGGU   | 59 | antisense | 31443 | FLT1:2967L21 siRNA<br>(2949C) stab11 3'-BrdU | cAucAGAGGccuccuuGcXsT       | 498 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | sense     | 31449 | FLT1:2340U21 siRNA<br>stab09                 | B CAACCCACAAAAUACAACAATT B  | 499 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | sense     | 31450 | FLT1:2340U21 siRNA inv<br>stab09             | B AACACAUAUAAACACCAACTT B   | 500 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | antisense | 31451 | FLT1:2358L21 siRNA<br>(2340C) stab10         | UUUGUUAUUUUUGUGGUUGTsT      | 501 |
| FLT1 | 2338 | AACAACCCACAAAAUACAACAAGA  | 57 | antisense | 31452 | FLT1:2358L21 siRNA<br>(2340C) inv stab10     | GUUGGUGUUUUUAUGUUGUUTsT     | 502 |
| FOS  | 17   | AGCAACUGAGAAAGCCAAAGACUGA | 64 | sense     | 30769 | FOS:19U21 siRNA stab04                       | B cAAcuGAGAAAGccAAAGacuTT B | 503 |
| FOS  | 1026 | GACAUGGACCUAUCUGGGUCCUU   | 65 | sense     | 30770 | FOS:1028U21 siRNA                            | B cAuGGAccuAucUGGGuccTT B   | 504 |



|      |      |                           |    |           |       |  |                            |     |
|------|------|---------------------------|----|-----------|-------|--|----------------------------|-----|
| FOS  | 1403 | UAGGGAGGACCUUAUCUGUGCGU   | 66 | sense     | 30771 | stab04<br>FOS:1405U21 siRNA<br>stab04              | B GGGAGGAGccuuAucuGuGcTT B | 505 |
| FOS  | 1460 | AAGCAUCCAUGUGUGGACUCAAG   | 67 | sense     | 30772 | FOS:1462U21 siRNA<br>stab04                        | B GcAuccAuGuGuGGAcucATT B  | 506 |
| FOS  | 17   | AGCAACUGAGAAAGCCAAAGACUGA | 64 | antisense | 30773 | FOS:37L21 siRNA (19C)<br>stab05                    | AGucuuGGcuucucAGuuGTsT     | 507 |
| FOS  | 1026 | GACAUGGACCUAUCUGGGUCCUU   | 65 | antisense | 30774 | FOS:1046L21 siRNA<br>(1028C) stab05                | GGAcccAGAuAGGuccAuGTsT     | 508 |
| FOS  | 1403 | UAGGGAGGACCUUAUCUGUGCGU   | 66 | antisense | 30775 | FOS:1423L21 siRNA<br>(1405C) stab05                | GcAcAGAuAAGGuccuccTsT      | 509 |
| FOS  | 1460 | AAGCAUCCAUGUGUGGACUCAAG   | 67 | antisense | 30776 | FOS:1480L21 siRNA<br>(1462C) stab05                | uGAGuccAcAcAuGGAuGcTsT     | 510 |
| FOS  | 17   | AGCAACUGAGAAAGCCAAAGACUGA | 64 | sense     | 31049 | FOS:19U21 siRNA                                    | CAACUGAGAAAGCCAAAGACUTT    | 511 |
| FOS  | 1026 | GACAUGGACCUAUCUGGGUCCUU   | 65 | sense     | 31050 | FOS:1028U21 siRNA                                  | CAUGGACCUAUCUGGGUCCTT      | 512 |
| FOS  | 1403 | UAGGGAGGACCUUAUCUGUGCGU   | 66 | sense     | 31051 | FOS:1405U21 siRNA                                  | GGGAGGACCUUAUCUGUGCTT      | 513 |
| FOS  | 1460 | AAGCAUCCAUGUGUGGACUCAAG   | 67 | sense     | 31052 | FOS:1462U21 siRNA                                  | GCAUCCAUGUGUGGACUCATT      | 514 |
| FOS  | 17   | AGCAACUGAGAAAGCCAAAGACUGA | 64 | antisense | 31125 | FOS:37L21 siRNA (19C)                              | AGUCUUGGCUUCUCAGUUGTT      | 515 |
| FOS  | 1026 | GACAUGGACCUAUCUGGGUCCUU   | 65 | antisense | 31126 | FOS:1046L21 siRNA<br>(1028C)                       | GGACCCAGAUAGGUCCAUGTT      | 516 |
| FOS  | 1403 | UAGGGAGGACCUUAUCUGUGCGU   | 66 | antisense | 31127 | FOS:1423L21 siRNA<br>(1405C)                       | GCACAGAUAAAGGUCCUCCCTT     | 517 |
| FOS  | 1460 | AAGCAUCCAUGUGUGGACUCAAG   | 67 | antisense | 31128 | FOS:1480L21 siRNA<br>(1462C)                       | UGAGUCCACACAUGGAUGCTT      | 518 |
| GAB2 | 2681 | UGAAGAGGGAAAGCGUGACAUUCUG | 68 | sense     | 31541 | GAB2:2681U21 siRNA                                 | AAGAGGGAAAGCGUGACAUCTT     | 519 |
| GAB2 | 4316 | GAGGAAGAAAGGAAGGAGAGGCUU  | 69 | sense     | 31542 | GAB2:4316U21 siRNA                                 | GGAAGAAAGGAAGGAGAGGCTT     | 520 |
| GAB2 | 5006 | GAGAGGACUGAGCCUACGGAAAG   | 70 | sense     | 31543 | GAB2:5006U21 siRNA                                 | GAGGACUGAGCCUACGGAAAT      | 521 |
| GAB2 | 5958 | UUUGCUUGUGACACAUUGGUAC    | 71 | sense     | 31544 | GAB2:5958U21 siRNA                                 | UGCUGUGGUGACACAUUGGUTT     | 522 |
| GAB2 | 2699 | UGAAGAGGGAAAGCGUGACAUUCUG | 68 | antisense | 31545 | GAB2:2699L21 siRNA<br>(2681C)                      | GAUGUCAGCUUUCUCCUCUUTT     | 523 |
| GAB2 | 4334 | GAGGAAGAAAGGAAGGAGAGGCUU  | 69 | antisense | 31546 | GAB2:4334L21 siRNA<br>(4316C)                      | GCCUCUCCUUCUUCUUCCTT       | 524 |
| GAB2 | 5024 | GAGAGGACUGAGCCUACGGAAAG   | 70 | antisense | 31547 | GAB2:5024L21 siRNA<br>(5006C)                      | UUCCGUAGGCUCAGUCCUCTT      | 525 |
| GAB2 | 5976 | UUUGCUUGUGGACACAUUGGUAC   | 71 | antisense | 31548 | GAB2:5976L21 siRNA<br>(5958C)                      | ACCAUGUGUCACACACAGCATT     | 526 |
| Her2 |      | CCGCAGUGAGCACCAGGA        | 72 | antisense | 25245 | RPI 17763 Her2Neu AS<br>as siRNA Str 2 (antisense) | B UC CAUGGUGCUCACUGCGGCU B | 527 |
| Her2 |      | AGCCGCAGUGAGCACCAG        | 73 | sense     | 25246 | RPI 17763 Her2Neu AS<br>as siRNA Str 1 (sense)     | B AGCCGCAGUGAGCACCAGGA B   | 528 |
| Her2 |      | CCGCAGUGAGCACCAGGA        | 72 | sense     | 25247 | RPI 17763 Her2Neu AS                               | B AGGUACCACGAGUGACGCCGA B  | 529 |

|      |      |  |  |    |           |       |   |                               |     |
|------|------|--|--|----|-----------|-------|---|-------------------------------|-----|
| Her2 |      |  |  | 74 | sense     | 25248 | as siRNA Str 1 (sense)<br>Inverted control                        | B UCGGCGUCACUCUGGUGGUACCU B   | 530 |
| Her2 |      |  |  | 72 | antisense | 25822 | RPI 17763 Her2Neu AS<br>as siRNA Str 2<br>(antisense)+2U overhang | UCCAUGGUGUCUCACUGCGGCUUU      | 531 |
| Her2 |      |  |  | 73 | sense     | 25823 | RPI 17763 Her2Neu AS<br>as siRNA Str 1<br>(sense)+2U overhang     | AGCCGCAGUGAGCACCAUGGAUU       | 532 |
| Her2 |      |  |  | 72 | antisense | 25842 | RPI 17763 Her2Neu AS<br>as siRNA Str 2<br>(antisense)+2U overhang | B UCCAUGGUGUCUCACUGCGGCUUU B  | 533 |
| Her2 |      |  |  | 73 | sense     | 25843 | RPI 17763 Her2Neu AS<br>as siRNA Str 1<br>(antisense)+2U overhang | B AGCCGCAGUGAGCACCAUGGAUU B   | 534 |
| Her2 |      |  |  | 75 | sense     | 28262 | Her2.1.sense Str1   | UGGGGUCGUCUAAAGACGUUTT        | 535 |
| Her2 | 3706 |  |  | 75 | antisense | 28263 | Her2.1.antisense Str2   | AACGUCUUUGACGACCCCAATT        | 536 |
| Her2 |      |  |  | 75 | sense     | 28264 | Her2.1.sense Str1   | UUGCAGAAACUGCUGGGGUTT         | 537 |
| Her2 | 3706 |  |  | 75 | antisense | 28265 | Her2.1.antisense Str2<br>inverted                                 | ACCCAGCAGUUUCUGCAATT          | 538 |
| Her2 |      |  |  | 76 | sense     | 28266 | Her2.2.sense Str1   | GGUGCUUGGAUCUGGCGCUTT         | 539 |
| Her2 | 2344 |  |  | 76 | antisense | 28267 | Her2.2.antisense Str2   | AGCGCCAGAUCCAAGCACCTT         | 540 |
| Her2 |      |  |  | 76 | sense     | 28268 | Her2.2.sense Str1<br>inverted                                     | UCGCGGUCUAGGUUCUGUGTT         | 541 |
| Her2 | 2344 |  |  | 76 | antisense | 28269 | Her2.2.antisense Str2<br>inverted                                 | CCACGAACCUAGACCCGCGATT        | 542 |
| Her2 |      |  |  | 77 | sense     | 28270 | Her2.3.sense Str1   | GAUCUUUGGAGCCUGGCATT          | 543 |
| Her2 |      |  |  | 77 | antisense | 28271 | Her2.3.antisense Str2   | UGCCAGGCUCCCAAAGAUCITT        | 544 |
| Her2 |      |  |  | 77 | sense     | 28272 | Her2.3.sense Str1<br>inverted                                     | ACGGUCCGAGGGUUUCUAGTT         | 545 |
| Her2 |      |  |  | 77 | antisense | 28273 | Her2.3.antisense Str2<br>inverted                                 | CUAGAAACCCUCCGACCGUTT         | 546 |
| Her2 | 2342 |  |  | 76 | sense     | 29989 | Her2.2.sense Str1 (site<br>2344)                                  | GsGsusGscuuGGAucuGGcGscsusTsT | 547 |
| Her2 | 2344 |  |  | 76 | antisense | 29990 | Her2.2.antisense Str2   | AsGsCsGsCsCAGAUCCAAGCACCTsT   | 548 |
| Her2 | 2342 |  |  | 76 | sense     | 29991 | Her2.2.sense Str1 (site<br>2344)                                  | GsGsUsGsUsUUGGAUCUCUGGCGCUTsT | 549 |

|      |      |                      |    |           |       |  |   |     |
|------|------|----------------------|----|-----------|-------|--|---|-----|
| Her2 | 2342 | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 29992 | Her2.2.sense Str1 (site 2344)                | GsGusGscuuGGAucuGGcGcuTTB                     | 550 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 29993 | Her2.2.antisense Str2                        | AsGsCsGsCsCsAsGsAsUsCsCsAsAsGsCs<br>AsCsCsTsT | 551 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 29994 | Her2.2.antisense Str2                        | AsGsCsGsCsCsAsGsAsUsCCCAAGCACCT <sub>sT</sub> | 552 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 29995 | Her2.2.antisense Str2                        | AsGsCsGsCsCsAsGsAsUsCsCsAsAsGCA<br>CCTsT      | 553 |
| Her2 |      | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 29996 | Her2.2.sense Str1<br>inverted                | uscsGscsGGGucuAGGuucGusGsTsT                  | 554 |
| Her2 |      | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 29997 | Her2.2.sense Str1<br>inverted                | UsCsGsCsGsGUCUAGGUUCUGUGGTsT                  | 555 |
| Her2 |      | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 29998 | Her2.2.sense Str1<br>inverted                | uscsGscsGGGucuAGGuucGuGGTTB                   | 556 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 29999 | Her2.2.antisense Str2<br>inverted            | CsCsAsCsGsAACCUAGACCCGCGATsT                  | 557 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 30000 | Her2.2.antisense Str2<br>inverted            | CsCsAsCsGsAsCsCsUsAsGsAsCsCsGs<br>CsGsAsTsT   | 558 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 30001 | Her2.2.antisense Str2<br>inverted            | CsCsAsCsGsAsCsCsUsAGACCCGCGAT <sub>sT</sub>   | 559 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 30002 | Her2.2.antisense Str2<br>inverted            | CsCsAsCsGsAsCsCsUsAsGsAsCsCsCGC<br>GATsT      | 560 |
| Her2 | 3704 | UGGGGUCGUCAAAAGACGUU | 75 | sense     | 30438 | Her2 sense (site 3706)<br>stab4              | B uGGGGucGucAAAGAcGuuTT B                     | 561 |
| Her2 | 3706 | UGGGGUCGUCAAAAGACGUU | 75 | antisense | 30439 | Her2 antisense (site 3706)<br>stab5          | AAcGucuuuGAcGAcceccATsT                       | 562 |
| Her2 | 3704 | UGGGGUCGUCAAAAGACGUU | 75 | sense     | 30440 | Her2 sense inverted (site 3706) stab4        | B uuGcAGAAAACuGcuGGGGuTT B                    | 563 |
| Her2 | 3706 | UGGGGUCGUCAAAAGACGUU | 75 | antisense | 30441 | Her2 antisense inverted<br>(site 3706) stab5 | AccccAGcAGuuuucGcAAATsT                       | 564 |
| Her2 | 2342 | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 30442 | Her2 sense (site 2344)<br>stab4              | B GGUGcuuGGAucuGGcGcuTT B                     | 565 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 30443 | Her2 antisense (site 2344)<br>stab5          | AGcGccAGAUccAAAGcAccTsT                       | 566 |
| Her2 | 2342 | GGUGCUUGGAUCUGGGCGCU | 76 | sense     | 30444 | Her2 sense inverted (site 2344) stab4        | B ucGcGGGucuAGGuucGuGGTT B                    | 567 |
| Her2 | 2344 | GGUGCUUGGAUCUGGGCGCU | 76 | antisense | 30445 | Her2 antisense inverted<br>(site 2344) stab5 | ccAcGAAccuAGAccGcGATsT                        | 568 |
| Her2 | 3704 | UGGGGUCGUCAAAAGACGUU | 75 | sense     | 30446 | Her2 sense Str1 site 3706<br>stab6           | B uGGGGucGucAAAAGAcGuuTT B                    | 569 |
| Her2 | 3704 | UGGGGUCGUCAAAAGACGUU | 75 | sense     | 30447 | Her2 sense inverted (site 3706) stab6        | B uuGcAGAAAACuGcuGGGGuTT B                    | 570 |

|      |      |                         |    |           |       |                                       |                             |     |
|------|------|-------------------------|----|-----------|-------|---------------------------------------|-----------------------------|-----|
| Her2 | 2342 | GGUGCUUGGAUCUGGCGCU     | 76 | sense     | 30448 | Her2 sense (site 2344) slab6          | B GGUGcuuGGAucUGGcGcuTT B   | 571 |
| Her2 | 2342 | GGUGCUUGGAUCUGGCGCU     | 76 | sense     | 30449 | Her2 sense inverted (site 2344) slab6 | B ucGcGGucuaGGuucGuGGTT B   | 572 |
| Her2 | 2344 | GGUGCUUGGAUCUGGCGCU     | 76 | sense     | 30645 | HER2:2346U21 siRNA slab07             | B GGUGcuuGGAucUGGcGcuTT B   | 573 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | antisense | 30646 | HER2:3726L21 siRNA (3708C) slab07     | B AAcGucuuuGAcGAcccATT B    | 574 |
| Her2 | 2344 | GGUGCUUGGAUCUGGCGCU     | 76 | antisense | 30647 | HER2:2364L21 siRNA (2346C) slab08     | AGcGcAGAuuccAAAGcAccTsT     | 575 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | sense     | 30648 | HER2:3708U21 siRNA slab08             | uGGGGucGucAAAAAGAcGuuTsT    | 576 |
| Her2 | 1882 | GAAUGGCUCAGUGACCGUG     | 78 | sense     | 30697 | HER2:1884U21 siRNA slab04             | B GAAUGGGucAGuGAccuGuTT B   | 577 |
| Her2 | 2344 | GGUGCUUGGAUCUGGCGCU     | 76 | sense     | 30698 | HER2:2346U21 siRNA slab04             | B GGUGcuuGGAucUGGcGcuTT B   | 565 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | antisense | 30699 | HER2:3726L21 siRNA (3708C) slab04     | B AAcGucuuuGAcGAcccATT B    | 578 |
| Her2 | 3877 | CACCUUCAAAAGGACACCU     | 79 | sense     | 30700 | HER2:3879U21 siRNA slab04             | B cAccuuCAAAAGGAcAccuTT B   | 579 |
| Her2 | 1882 | GAAUGGCUCAGUGACCGUG     | 78 | antisense | 30701 | HER2:1902L21 siRNA (1884C) slab05     | AcAGGucAcuGAGcGcAAuucTsT    | 580 |
| Her2 | 2344 | GGUGCUUGGAUCUGGCGCU     | 76 | antisense | 30702 | HER2:2364L21 siRNA (2346C) slab05     | AGcGcAGAuuccAAAGcAccTsT     | 566 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | sense     | 30703 | HER2:3708U21 siRNA slab05             | uGGGGucGucAAAAAGAcGuuTsT    | 581 |
| Her2 | 3877 | CACCUUCAAAAGGACACCU     | 79 | antisense | 30704 | HER2:3897L21 siRNA (3879C) slab05     | AGGuGuccuuuGAAAGGuTsT       | 582 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | sense     | 30951 | HER2:3708U21 siRNA slab07             | B uGGGGucGucAAAAAGAcGuuTT B | 583 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | antisense | 30952 | HER2:3726L21 siRNA (3708C) slab08     | AacGucuuuGAcGAcccATTsT      | 584 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | sense     | 30953 | HER2:3708U21 siRNA slab04             | B uGGGGucGucAAAAAGAcGuuTT B | 561 |
| Her2 | 3706 | UGGGGUCGUCAAAGACGUU     | 75 | antisense | 30954 | HER2:3726L21 siRNA (3708C) slab05     | AacGucuuuGAcGAcccATTsT      | 562 |
| HRAS | 77   | GAACCAUUUUUGGACGAAUACG  | 80 | sense     | 31525 | HRAS:77U21 siRNA                      | ACCAUUUUUGGACGAAUATT        | 585 |
| HRAS | 154  | GCCUGUUGGACAUCCUGGAUACC | 81 | sense     | 31526 | HRAS:154U21 siRNA                     | CUGUUGGACAUCCUGGAUATT       | 586 |
| HRAS | 459  | GAGGAUGCCUUCUACACGUUGGU | 82 | sense     | 31527 | HRAS:459U21 siRNA                     | GGAUGCCUUCUACACGUUGTT       | 587 |
| HRAS | 513  | CUGAACCCUCCUGAGAGAGUGG  | 83 | sense     | 31528 | HRAS:513U21 siRNA                     | GAACCCUCCUGAGAGAGUTT        | 588 |
| HRAS | 95   | GAACCAUUUUUGGACGAAUACG  | 80 | antisense | 31529 | HRAS:95L21 siRNA (77C)                | UAUUCGUCCACAAAAUUGGUTT      | 589 |

|      |      |                          |    |           |       |                                   |                            |     |
|------|------|--------------------------|----|-----------|-------|-----------------------------------|----------------------------|-----|
| HRAS | 172  | GCCUGUUGGACAUCCUGGAUACC  | 81 | antisense | 31530 | HRAS:172L21 siRNA<br>(154C)       | UAUCCAGGAUGUCCAACAGTT      | 590 |
| HRAS | 477  | GAGGAUGCCUUCUACACGUUGGU  | 82 | antisense | 31531 | HRAS:477L21 siRNA<br>(459C)       | CAACGUGUAGAAGGCAUCCTT      | 591 |
| HRAS | 531  | CUGAACCCUCCUGAUGAGAGUGG  | 83 | antisense | 31532 | HRAS:531L21 siRNA<br>(513C)       | ACUCUCAUCAGGAGGGUUCTT      | 592 |
| hTR  | 31   | UCAGCUUGGCCAAUCCGUGCGGU  | 84 | sense     | 29950 | hTR:33U21 siRNA                   | AGCUUGGCCAAUCCGUGCGGU      | 593 |
| hTR  | 99   | GGUUGCGGAGGUGGGCCUGGGA   | 85 | sense     | 29951 | hTR:101U21 siRNA                  | UUGCGGAGGUGGGCCUGGGA       | 594 |
| hTR  | 233  | GCCUGCCGCUUCCACCGUUCAU   | 86 | sense     | 29952 | hTR:235U21 siRNA                  | CUGCCGCUUCCACCGUUCAU       | 595 |
| hTR  | 380  | GCACCCACUGCCACCGCGAAGAG  | 87 | sense     | 29953 | hTR:382U21 siRNA                  | ACCCACUGCCACCGCGAAGAG      | 596 |
| hTR  | 492  | GCGGGCGCGAUUCCUGAGCUG    | 88 | sense     | 29954 | hTR:494U21 siRNA                  | GCGGGCGGAUCCUGAGCUG        | 597 |
| hTR  | 31   | UCAGCUUGGCCAAUCCGUGCGGU  | 84 | antisense | 29955 | hTR:531L21 siRNA (33C)            | CGCACGGAUUGGCCAAGCUGA      | 598 |
| hTR  | 99   | GGUUGCGGAGGUGGGCCUGGGA   | 85 | antisense | 29956 | hTR:121L21 siRNA<br>(101C)        | CCAGGCCACCCUCCGCAACC       | 599 |
| hTR  | 233  | GCCUGCCGCUUCCACCGUUCAU   | 86 | antisense | 29957 | hTR:255L21 siRNA<br>(235C)        | GAACGGUGGAAGGCGGCAGGC      | 600 |
| hTR  | 380  | GCACCCACUGCCACCGCGAAGAG  | 87 | antisense | 29958 | hTR:402L21 siRNA<br>(382C)        | CUUCGGGUGGCAGUGGGUGC       | 601 |
| hTR  | 492  | GCGGGCGCGAUUCCUGAGCUG    | 88 | antisense | 29959 | hTR:514L21 siRNA<br>(494C)        | GCUCAGGGAUUCGCGCCGCGC      | 602 |
| hTR  | 62   | GCUCCCUUUAUAAGCCGACUCGC  | 89 | sense     | 30913 | hTR:64U21 siRNA stab04            | B uccuuuuAAAGccGAcucTT B   | 603 |
| hTR  | 241  | CCUCCACCGUUCAUUCUAGAGC   | 90 | sense     | 30914 | hTR:243U21 siRNA<br>stab04        | B uuccAccGuucAuucuaGATT B  | 604 |
| hTR  | 243  | UUCCACCGUUCAUUCUAGAGCAA  | 91 | sense     | 30915 | hTR:245U21 siRNA<br>stab04        | B ccAccGuucAuucuaAGAGcTT B | 605 |
| hTR  | 395  | GCGAAGAGUUGGGCUCUGUCAGC  | 92 | sense     | 30916 | hTR:397U21 siRNA<br>stab04        | B GAAGAGuuGGGcucuGucATT B  | 606 |
| hTR  | 62   | GCUCCCUUUAUAAGCCGACUCGC  | 89 | antisense | 30917 | hTR:82L21 siRNA (64C)<br>stab05   | GAGucGGcuuAuAAAAGGATsT     | 607 |
| hTR  | 241  | CCUCCACCGUUCAUUCUAGAGC   | 90 | antisense | 30918 | hTR:261L21 siRNA<br>(243C) stab05 | ucuAGAAuGAAcGGuGGAATsT     | 608 |
| hTR  | 243  | UUCCACCGUUCAUUCUAGAGCAA  | 91 | antisense | 30919 | hTR:263L21 siRNA<br>(245C) stab05 | GcucuAGAAuGAAcGGuGGTst     | 609 |
| hTR  | 395  | GCGAAGAGUUGGGCUCUGUCAGC  | 92 | antisense | 30920 | hTR:415L21 siRNA<br>(397C) stab05 | uGAcAGAGGcccAAAcucucTsT    | 610 |
| IKKg | 166  | UGGAAGAGCCAAACUGUGAGAGAU | 93 | sense     | 30801 | IKKg:166U21 siRNA<br>stab04       | B GAAAGAGccAAcuGuGuGAGTT B | 611 |
| IKKg | 407  | AGAGGGAGGAGAAAGGAGUUCUC  | 94 | sense     | 30802 | IKKg:407U21 siRNA<br>stab04       | B AGGGAGGAGAAAGGAGUuccTT B | 612 |
| IKKg | 1162 | AGGGAGUACAGCAAAACUGAAGGC | 95 | sense     | 30803 | IKKg:1162U21 siRNA<br>stab04      | B GGAGuAcAGcAAAcuGAAAGTT B | 613 |

|      |      |                          |     |           |       |                                      |                            |     |
|------|------|--------------------------|-----|-----------|-------|--------------------------------------|----------------------------|-----|
| IKKg | 1390 | GUCAUGGAGUGCAUUGAGUAGGG  | 96  | sense     | 30804 | IKKg:1390U21 siRNA<br>stab04         | B CAUGGAGUGcAuGAGuAGTT B   | 614 |
| IKKg | 184  | UGGAAGAGCCAAACUGUGAGAU   | 93  | antisense | 30805 | IKKg:184L21 siRNA<br>(166C) stab05   | cucAcAcAGuuGGcuccuucTsT    | 615 |
| IKKg | 425  | AGAGGGAGGAGAAGGAGUUCUC   | 94  | antisense | 30806 | IKKg:425L21 siRNA<br>(407C) stab05   | GGAACuccuuccuccuccuTsT     | 616 |
| IKKg | 1180 | AGGAGUACAGCAAACUGAAGGC   | 95  | antisense | 30807 | IKKg:1180L21 siRNA<br>(1162C) stab05 | cuucAGuuuGcuGUAcuucTsT     | 617 |
| IKKg | 1408 | GUCAUGGAGUGCAUUGAGUAGGG  | 96  | antisense | 30808 | IKKg:1408L21 siRNA<br>(1390C) stab05 | cuAcucAAuGcAcuccAuGTsT     | 618 |
| IL2  | 28   | UAACCUCAACUCCUGCCACAAUG  | 97  | sense     | 30809 | IL2:30U21 siRNA stab04               | B AccucAAuccuGccAcAAATT B  | 619 |
| IL2  | 61   | AACUCCUGUCUUGCAUUGCACUA  | 98  | sense     | 30810 | IL2:63U21 siRNA stab04               | B cuccuGuccuuGcAuGcAcTT B  | 620 |
| IL2  | 86   | UCUUGCACUUUGUCACAAACAGUG | 99  | sense     | 30811 | IL2:88U21 siRNA stab04               | B uuGcAcuuGucAcAAAcAGTT B  | 621 |
| IL2  | 143  | AACACAGCUAACACUGGAGCAUU  | 100 | sense     | 30812 | IL2:145U21 siRNA stab04              | B cAcAGcuAcAAcuGGAGcATT B  | 622 |
| IL2  | 28   | UAACCUCAACUCCUGCCACAAUG  | 97  | antisense | 30813 | IL2:48L21 siRNA (30C)<br>stab05      | uuGuGGcAGGAGuuGAGGuTsT     | 623 |
| IL2  | 61   | AACUCCUGUCUUGCAUUGCACUA  | 98  | antisense | 30814 | IL2:81L21 siRNA (63C)<br>stab05      | GuGcAAuGcAAAGAcAGGAGTsT    | 624 |
| IL2  | 86   | UCUUGCACUUUGUCACAAACAGUG | 99  | antisense | 30815 | IL2:106L21 siRNA (88C)<br>stab05     | cuGuuuGuGAcAAAGuGcAAATsT   | 625 |
| IL2  | 143  | AACACAGCUAACACUGGAGCAUU  | 100 | antisense | 30816 | IL2:163L21 siRNA (145C)<br>stab05    | uGcuccAGuuGuAGcuGuGTsT     | 626 |
| IL2  | 28   | UAACCUCAACUCCUGCCACAAUG  | 97  | sense     | 31400 | IL2:30U21 siRNA                      | ACCUCAACUCCUGCCACAAATT     | 627 |
| IL2  | 61   | AACUCCUGUCUUGCAUUGCACUA  | 98  | sense     | 31401 | IL2:63U21 siRNA                      | CUCCUGUCUUGCAUUGCACATT     | 628 |
| IL2  | 86   | UCUUGCACUUUGUCACAAACAGUG | 99  | sense     | 31402 | IL2:88U21 siRNA                      | UUGCACUUUGUCACAAACAGTT     | 629 |
| IL2  | 143  | AACACAGCUAACACUGGAGCAUU  | 100 | sense     | 31403 | IL2:145U21 siRNA                     | CACAGCUAACACUGGAGCATT      | 630 |
| IL2  | 28   | UAACCUCAACUCCUGCCACAAUG  | 97  | antisense | 31404 | IL2:48L21 siRNA (30C)                | UUGUGCAGGAGUUUGAGGUTT      | 631 |
| IL2  | 61   | AACUCCUGUCUUGCAUUGCACUA  | 98  | antisense | 31405 | IL2:81L21 siRNA (63C)                | GUGCAAUGCAAACACAGGAGTT     | 632 |
| IL2  | 86   | UCUUGCACUUUGUCACAAACAGUG | 99  | antisense | 31406 | IL2:106L21 siRNA (88C)               | CUGUUUGUGACAAGUGCAAATT     | 633 |
| IL2  | 143  | AACACAGCUAACACUGGAGCAUU  | 100 | antisense | 31407 | IL2:163L21 siRNA (145C)              | UGCUCCAGUUUGUAGCUGUGTT     | 634 |
| KDR  | 3074 | UGUCCACUUACCUGAGGAGCAAG  | 101 | sense     | 30785 | KDR:3076U21 siRNA<br>stab04          | B uccAcuuAccuGAGGAGcATT B  | 635 |
| KDR  | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | sense     | 30786 | KDR:3854U21 siRNA<br>stab04          | B uGAGcAuGGAAGAGGAuucTT B  | 636 |
| KDR  | 4087 | AUGGUUCUUGCCUCAGAAAGAGCU | 103 | sense     | 30787 | KDR:4089U21 siRNA<br>stab04          | B GGuuuuGccucAGAAGAGATT B  | 637 |
| KDR  | 4189 | UCUGAAGGCUCAAAACAGACAAG  | 104 | sense     | 30788 | KDR:4191U21 siRNA<br>stab04          | B uGAAGGcucAAAaccAGAcATT B | 638 |
| KDR  | 3074 | UGUCCACUUACCUGAGGAGCAAG  | 101 | antisense | 30789 | KDR:3094L21 siRNA<br>(3076C) stab05  | uGcuccucAGGUAAAGuGGATsT    | 639 |
| KDR  | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | antisense | 30790 | KDR:3872L21 siRNA                    | GAAuccuuccuuccAuGcucATsT   | 640 |

(400/104)

|       |      |                          |     |           |       |   |                          |     |
|-------|------|--------------------------|-----|-----------|-------|---|--------------------------|-----|
| KDR   | 4087 | AUGGUUUCUUUCCUCACAGAGGCU | 103 | antisense | 30791 | (3854C) stab05<br>KDR:4107L21 siRNA<br>(4089C) stab05 | cucuuucuGAGGcAAGAAccTsT  | 641 |
| KDR   | 4189 | UCUGAAGGCUCUAAACCAGACAAG | 104 | antisense | 30792 | KDR:4209L21 siRNA<br>(4191C) stab05                   | uGucuGGuuuGAGccuuuAAsT   | 642 |
| KDR   | 3074 | UGUCCACUUUACCUGAGGAGCAAG | 101 | sense     | 31426 | KDR:3076U21 siRNA                                     | UCCACUUACCUGAGGAGCATT    | 643 |
| KDR   | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | sense     | 31427 | KDR:3854U21 siRNA                                     | UGAGCAUGGAAGAGGAUUCU     | 644 |
| KDR   | 4087 | AUGGUUCUUCCUCACAGAGGCU   | 103 | sense     | 31428 | KDR:4089U21 siRNA                                     | GGUUCUUGCCUCACAGAGATT    | 645 |
| KDR   | 4189 | UCUGAAGGCUCUAAACCAGACAAG | 104 | sense     | 31429 | KDR:4191U21 siRNA                                     | UGAAGGCUCUAAACCAGACATT   | 646 |
| KDR   | 3074 | UGUCCACUUUACCUGAGGAGCAAG | 101 | antisense | 31430 | KDR:3094L21 siRNA<br>(3076C)                          | UGCUCUCUCCAGGUAAAGUGGATT | 647 |
| KDR   | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | antisense | 31431 | KDR:3872L21 siRNA<br>(3854C)                          | GAAUCCUCUUCUCCAUUCUATT   | 648 |
| KDR   | 4087 | AUGGUUCUUUCCUCACAGAGGCU  | 103 | antisense | 31432 | KDR:4107L21 siRNA<br>(4089C)                          | CUCUUCUGAGGCAAGAACCTT    | 649 |
| KDR   | 4189 | UCUGAAGGCUCUAAACCAGACAAG | 104 | antisense | 31433 | KDR:4209L21 siRNA<br>(4191C)                          | UGUCUGGUUUUGAGCCUUCATT   | 650 |
| KDR   | 3302 | UGACCUUGGAGCAUCUCAUCUGU  | 105 | sense     | 31434 | KDR:3304U21 siRNA                                     | ACCUUGGAGCAUCUCAUCU      | 651 |
| KDR   | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | sense     | 31435 | KDR:3854U21 siRNA                                     | UGAGCAUGGAAGAGGAUUCU     | 654 |
| KDR   | 3892 | UCACCUUUUCCUGUAUGGAGGA   | 106 | sense     | 31436 | KDR:3894U21 siRNA                                     | ACCUUUUCCUGUAUGGAGTT     | 652 |
| KDR   | 3946 | GACAACACAGCAGGAUUCAGUCA  | 107 | sense     | 31437 | KDR:3948U21 siRNA                                     | CAACACAGCAGGAUUCAGU      | 653 |
| KDR   | 3302 | UGACCUUGGAGCAUCUCAUCUGU  | 105 | antisense | 31438 | KDR:3322L21 siRNA<br>(3304C)                          | AGAUGAGAUGCUCUCCAAAGGUTT | 654 |
| KDR   | 3852 | UUUGAGCAUGGAAGAGGAUUCUG  | 102 | antisense | 31439 | KDR:3872L21 siRNA<br>(3854C)                          | GAAUCCUCUUCUCCAUUCUATT   | 648 |
| KDR   | 3892 | UCACCUUUUCCUGUAUGGAGGA   | 106 | antisense | 31440 | KDR:3912L21 siRNA<br>(3894C)                          | CUCCAUACAGGAAACAGGUTT    | 655 |
| KDR   | 3946 | GACAACACAGCAGGAUUCAGUCA  | 107 | antisense | 31441 | KDR:3966L21 siRNA<br>(3948C)                          | ACUGAUUCCUGCUGUGUUUGTT   | 656 |
| KRAS2 | 625  | ACAAGACAGGGUGUUGAUGAUGC  | 108 | sense     | 31533 | KRAS2:625U21 siRNA                                    | AAGACAGGGUGUUGAUGA       | 657 |
| KRAS2 | 625  | ACAAGACAGGGUGUUGAUGAUGC  | 108 | sense     | 31533 | KRAS2:625U21 siRNA                                    | AAGACAGGGUGUUGAUGA       | 657 |
| KRAS2 | 920  | UUUCCUGAAGUGCCAGUAUUC    | 109 | sense     | 31534 | KRAS2:920U21 siRNA                                    | UCCUCGAAGUGCCAGUAU       | 658 |
| KRAS2 | 920  | UUUCCUGAAGUGCCAGUAUUC    | 109 | sense     | 31534 | KRAS2:920U21 siRNA                                    | UCCUCGAAGUGCCAGUAU       | 658 |
| KRAS2 | 999  | AUUUCUGUCUUGGGUUUUUGGU   | 110 | sense     | 31535 | KRAS2:999U21 siRNA                                    | UUUCUGUCUUGGGUUUUUG      | 659 |
| KRAS2 | 999  | AUUUCUGUCUUGGGUUUUUGGU   | 110 | sense     | 31535 | KRAS2:999U21 siRNA                                    | UUUCUGUCUUGGGUUUUUG      | 659 |
| KRAS2 | 1013 | GUUUUUGGUGCAUGCAGUUGAUU  | 111 | sense     | 31536 | KRAS2:1013U21 siRNA                                   | UUUUGGUGCAUGCAGUUG       | 660 |
| KRAS2 | 1013 | GUUUUUGGUGCAUGCAGUUGAUU  | 111 | sense     | 31536 | KRAS2:1013U21 siRNA                                   | UUUUGGUGCAUGCAGUUG       | 660 |
| KRAS2 | 643  | ACAAGACAGGGUGUUGAUGAUGC  | 108 | antisense | 31537 | KRAS2:643L21 siRNA<br>(625C)                          | AUCAUCAAACCCUGUCU        | 661 |
| KRAS2 | 643  | ACAAGACAGGGUGUUGAUGAUGC  | 108 | antisense | 31537 | KRAS2:643L21 siRNA                                    | AUCAUCAAACCCUGUCU        | 661 |

|                    |      |                           |     |           |       |  |                            |     |
|--------------------|------|---------------------------|-----|-----------|-------|--|----------------------------|-----|
| KRAS2              | 938  | UUUCCUCGAAGUGCCAGAUUCC    | 109 | antisense | 31538 | (625C)<br>KRAS2:938L21 siRNA<br>(920C) | AAUACUGGCACUUCGAGGATT      | 662 |
| KRAS2              | 938  | UUUCCUCGAAGUGCCAGAUUCC    | 109 | antisense | 31538 | KRAS2:938L21 siRNA<br>(920C)           | AAUACUGGCACUUCGAGGATT      | 662 |
| KRAS2              | 1017 | AUUUCUGUCUUGGGGUUUUUGGU   | 110 | antisense | 31539 | KRAS2:1017L21 siRNA<br>(999C)          | CAAAAACCCCAAGACAGAAATT     | 663 |
| KRAS2              | 1017 | AUUUCUGUCUUGGGGUUUUUGGU   | 110 | antisense | 31539 | KRAS2:1017L21 siRNA<br>(999C)          | CAAAAACCCCAAGACAGAAATT     | 663 |
| KRAS2              | 1031 | GUUUUUGGUGCAUGCAGUUGAUU   | 111 | antisense | 31540 | KRAS2:1031L21 siRNA<br>(1013C)         | UCAACUGCAUGCACCACAAAATT    | 664 |
| KRAS2              | 1031 | GUUUUUGGUGCAUGCAGUUGAUU   | 111 | antisense | 31540 | KRAS2:1031L21 siRNA<br>(1013C)         | UCAACUGCAUGCACCACAAAATT    | 664 |
| MAPK1              | 424  | ACCAGACCUACUGCCAGAGAACC   | 112 | sense     | 30817 | MAPK1:424U21 siRNA<br>stab04           | B cAGAccuAcuGccAGAGAATT B  | 665 |
| MAPK1              | 778  | AUCACACAGGUUCCUGACAGAA    | 113 | sense     | 30818 | MAPK1:778U21 siRNA<br>stab04           | B cAcAcAGGGGuuccuGAcAGTT B | 666 |
| MAPK1              | 1718 | UUGGCUCUAGUCACUGGGCAUCUC  | 114 | sense     | 30819 | MAPK1:1718U21 siRNA<br>stab04          | B GGcucuAGucAcuGGcAucTT B  | 667 |
| MAPK1              | 2525 | ACUGUGGAGUUGACUCUGGUGUUC  | 115 | sense     | 30820 | MAPK1:2525U21 siRNA<br>stab04          | B uGuGGAGuuAGucGGuGuTT B   | 668 |
| MAPK1              | 442  | ACCAGACCUACUGCCAGAGAACC   | 112 | antisense | 30821 | MAPK1:442L21 siRNA<br>(424C) stab05    | uucucuGGcAGuAGGucuGTsT     | 669 |
| MAPK1              | 796  | AUCACACAGGUUCCUGACAGAA    | 113 | antisense | 30822 | MAPK1:796L21 siRNA<br>(778C) stab05    | cuGucAGGAAcccuGuGuGTsT     | 670 |
| MAPK1              | 1736 | UUGGCUCUAGUCACUGGGCAUCUC  | 114 | antisense | 30823 | MAPK1:1736L21 siRNA<br>(1718C) stab05  | GauGccAGuGAcuAGAGccTsT     | 671 |
| MAPK1              | 2543 | ACUGUGGAGUUGACUCUGGGUGUUC | 115 | antisense | 30824 | MAPK1:2543L21 siRNA<br>(2525C) stab05  | AcAccGAGuAcAAcuccAcATsT    | 672 |
| MAPK1 <sub>4</sub> | 1280 | GCCUACUUUGCUCAGUACCACGA   | 116 | sense     | 31586 | MAPK14:1280U21 siRNA                   | CUACUUUUGCUCAGUACCACCTT    | 673 |
| MAPK1 <sub>4</sub> | 1611 | UGUCUGUCUUUGUGGGAGGGUAA   | 117 | sense     | 31587 | MAPK14:1611U21 siRNA                   | UCUGUCUUUUGUGGGAGGGGUTT    | 674 |
| MAPK1 <sub>4</sub> | 2884 | AAAAGGGUCUUCUUGGCAGCUUA   | 118 | sense     | 31588 | MAPK14:2884U21 siRNA                   | AAGGGUCUUCUUGGCAGCUTT      | 675 |
| MAPK1 <sub>4</sub> | 3556 | GGACUCUAAAGCUGGAGCUCUUGG  | 119 | sense     | 31589 | MAPK14:3556U21 siRNA                   | ACUCUAAAGCUGGAGCUCUUTT     | 676 |
| MAPK1 <sub>4</sub> | 1298 | GCCUACUUUGCUCAGUACCACGA   | 116 | antisense | 31590 | MAPK14:1298L21 siRNA<br>(1280C)        | GUGGUACUGAGCAAAAGUAGTT     | 677 |
| MAPK1 <sub>4</sub> | 1629 | UGUCUGUCUUUGUGGGAGGGUAA   | 117 | antisense | 31591 | MAPK14:1629L21 siRNA<br>(1611C)        | ACCCUCCCAACAAAGACAGATT     | 678 |
| MAPK1              | 2902 | AAAAGGGUCUUCUUGGCAGCUUA   | 118 | antisense | 31592 | MAPK14:2902L21 siRNA                   | AGCUGCCCAAGAAAGACCCCUUTT   | 679 |



|       |      |                          |     |           |       |                                  |  |                            |     |
|-------|------|--------------------------|-----|-----------|-------|----------------------------------|--|----------------------------|-----|
| 4     | 3574 | GGACUCUAAGCUGGAGCUCUUGG  | 119 | antisense |       | (284C)                           |  | AAGAGCUCCAGCUUAGAGUTT      | 680 |
| MAPK1 | 3574 |                          |     |           | 31593 | MAPK14:3574L21 siRNA (3556C)     |  |                            |     |
| MAPK8 | 733  | AACAGCUUGGAACACCAUGUCCU  | 120 | sense     | 31517 | MAPK8:735U21 siRNA               |  | CAGCUUGGAACACCAUGUCTT      | 681 |
| MAPK8 | 853  | UUUCCCGCUGACUCAGAACAC    | 121 | sense     | 31518 | MAPK8:855U21 siRNA               |  | UCCCGCUGACUCAGAACCTT       | 682 |
| MAPK8 | 1224 | CAUUGUCAACAGAUCCGACUUG   | 122 | sense     | 31519 | MAPK8:1226U21 siRNA              |  | AUGUCAACAGAUCCGACUUTT      | 683 |
| MAPK8 | 1242 | CUUUGCCUCUGAUACAGACAGC   | 123 | sense     | 31520 | MAPK8:1244U21 siRNA              |  | UUGCCUCUGAUACAGACATT       | 684 |
| MAPK8 | 733  | AACAGCUUGGAACACCAUGUCCU  | 120 | antisense | 31521 | MAPK8:753L21 siRNA (735C)        |  | GACAUGGUGUCCCAAGCUGTT      | 685 |
| MAPK8 | 853  | UUUCCCGCUGACUCAGAACAC    | 121 | antisense | 31522 | MAPK8:873L21 siRNA (855C)        |  | GUUCUGAGUCAGCUGGGAATT      | 686 |
| MAPK8 | 1224 | CAAUGUCAACAGAUCCGACUUG   | 122 | antisense | 31523 | MAPK8:1244L21 siRNA (1226C)      |  | AAGUCGGAUCUGUUGACAUTT      | 687 |
| MAPK8 | 1242 | CUUUGCCUCUGAUACAGACAGC   | 123 | antisense | 31524 | MAPK8:1262L21 siRNA (1244C)      |  | UGUCUGUAUCAGAGGCCAATT      | 688 |
| MYB   | 146  | AACAACCCACAAAUAACAACAAGA | 57  | sense     | 30977 | MYB:148U21 siRNA stab04          |  | B GuGacGAGGAUGAUAGAGGATT B | 689 |
| MYB   | 455  | AACAACCCACAAAUAACAACAAGA | 57  | sense     | 30978 | MYB:457U21 siRNA stab04          |  | B GGucGuuAuuGccAAGcATT B   | 690 |
| MYB   | 706  | AACAACCCACAAAUAACAACAAGA | 57  | sense     | 30979 | MYB:708U21 siRNA stab04          |  | B cuGAGGAGucuuuAAAAAGTT B  | 691 |
| MYB   | 1051 | AACAACCCACAAAUAACAACAAGA | 57  | sense     | 30980 | MYB:1053U21 siRNA stab04         |  | B GuGcuAccAAcAcAGAAccTT B  | 692 |
| MYB   | 146  | AACAACCCACAAAUAACAACAAGA | 57  | antisense | 30981 | MYB:166L21 siRNA (148C) stab05   |  | uccucAucAuccucGucAcTsT     | 693 |
| MYB   | 455  | AACAACCCACAAAUAACAACAAGA | 57  | antisense | 30982 | MYB:475L21 siRNA (457C) stab05   |  | uGcuuGGcAAuAAcAGAccTsT     | 694 |
| MYB   | 706  | AACAACCCACAAAUAACAACAAGA | 57  | antisense | 30983 | MYB:726L21 siRNA (708C) stab05   |  | cuuuuGAAGAGAcuccuGcAGTsT   | 695 |
| MYB   | 1051 | AACAACCCACAAAUAACAACAAGA | 57  | antisense | 30984 | MYB:1071L21 siRNA (1053C) stab05 |  | GGuucuGuGuuGGuAGcAcTsT     | 696 |
| MYB   | 146  | CAGUGACGAGGAUGAGGACU     | 124 | sense     | 31025 | MYB:148U21 siRNA                 |  | GUGACGAGGAUGAUGAGGATT      | 697 |
| MYB   | 455  | UUGGUCUGUUAUUGCCAAAGCACU | 125 | sense     | 31026 | MYB:457U21 siRNA                 |  | GGUCUGUUAUUGCCAAAGCATT     | 698 |
| MYB   | 706  | AUCUGCAGGAGUCUUAAGCC     | 126 | sense     | 31027 | MYB:708U21 siRNA                 |  | CUGCAGGAGUCUUAAGAAAGTT     | 699 |
| MYB   | 1051 | AGGUGCUACCAACACAGAACCCAC | 127 | sense     | 31028 | MYB:1053U21 siRNA                |  | GUGCUACCAACACAGAACCCCTT    | 700 |
| MYB   | 146  | CAGUGACGAGGAUGAGGACU     | 124 | antisense | 31101 | MYB:166L21 siRNA (148C)          |  | UCCUCAUCAUCCUCGUCACCTT     | 701 |
| MYB   | 455  | UUGGUCUGUUAUUGCCAAAGCACU | 125 | antisense | 31102 | MYB:475L21 siRNA (457C)          |  | UGCuuGGcAAuAAcAGACCCCTT    | 702 |
| MYB   | 706  | AUCUGCAGGAGUCUUAAGCC     | 126 | antisense | 31103 | MYB:726L21 siRNA (708C)          |  | CUUUUGAAGACUCCUGCAGTT      | 703 |

|     |      |                          |     |           |       |   |                             |     |
|-----|------|--------------------------|-----|-----------|-------|---|-----------------------------|-----|
| MYB | 1051 | AGGUGCUACCAACACAGAACCCAC | 127 | antisense | 31104 | MYB:1071L21 siRNA<br>(1053C)            | GGUUCUGUGUUGUAGCACTT        | 704 |
| MYC | 1524 | CAAGAGGGUCAAGUUGGACAGUG  | 128 | sense     | 30825 | MYC:1526U21 siRNA<br>stab04             | B AGAGGGUcAAAGuuGGAGcAGTT B | 705 |
| MYC | 1778 | AAGCAGAGGAGCAAAAGCUCUAAU | 129 | sense     | 30826 | MYC:1780U21 siRNA<br>stab04             | B GCAGAGGAGCAAAAGcucATT B   | 706 |
| MYC | 1859 | UACGGAACUCUUGUGCGUAAGGA  | 130 | sense     | 30827 | MYC:1861U21 siRNA<br>stab04             | B cGGAAcucuuGuGcGuAAAGTT B  | 707 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 30828 | MYC:1971U21 siRNA<br>stab04             | B AAccuuGGcuGAGucuuGATT B   | 708 |
| MYC | 1524 | CAAGAGGGUCAAGUUGGACAGUG  | 128 | antisense | 30829 | MYC:1544L21 siRNA<br>(1526C) stab05     | cuGuccAAcuuGAcccucuTsT      | 709 |
| MYC | 1778 | AAGCAGAGGAGCAAAAGCUCUAAU | 129 | antisense | 30830 | MYC:1798L21 siRNA<br>(1780C) stab05     | uGAGcuuuuuGcuccucuGcTsT     | 710 |
| MYC | 1859 | UACGGAACUCUUGUGCGUAAGGA  | 130 | antisense | 30831 | MYC:1879L21 siRNA<br>(1861C) stab05     | cuuAcGcAAAGAGGuuccGTsT      | 711 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 30832 | MYC:1989L21 siRNA<br>(1971C) stab05     | ucAAGAcucAGccAAGGuuTsT      | 712 |
| MYC | 1524 | CAAGAGGGUCAAGUUGGACAGUG  | 128 | sense     | 30993 | MYC:1526U21 siRNA                       | AGAGGGUCAAGUUGGACAGTT       | 713 |
| MYC | 1778 | AAGCAGAGGAGCAAAAGCUCUAAU | 129 | sense     | 30994 | MYC:1780U21 siRNA                       | GCAGAGGAGCAAAAGCUCATT       | 714 |
| MYC | 1859 | UACGGAACUCUUGUGCGUAAGGA  | 130 | sense     | 30995 | MYC:1861U21 siRNA                       | CGBAACUCUUGUGCGGUAAGTT      | 715 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 30996 | MYC:1971U21 siRNA                       | AACCUUGGCUGAGUCUUGATT       | 716 |
| MYC | 1524 | CAAGAGGGUCAAGUUGGACAGUG  | 128 | antisense | 31069 | MYC:1544L21 siRNA<br>(1526C)            | CUGUCCAACUUGACCCUCUTT       | 717 |
| MYC | 1778 | AAGCAGAGGAGCAAAAGCUCUAAU | 129 | antisense | 31070 | MYC:1798L21 siRNA<br>(1780C)            | UGAGCUUUUUGCUCCUCUGCITT     | 718 |
| MYC | 1859 | UACGGAACUCUUGUGCGUAAGGA  | 130 | antisense | 31071 | MYC:1879L21 siRNA<br>(1861C)            | CUUACCGCACAAAGAGUUCCGTT     | 719 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 31072 | MYC:1989L21 siRNA<br>(1971C)            | UCAAGACUCAGCCAAAGGUUTT      | 720 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 31377 | MYC:1971U21 siRNA<br>stab04             | B AACcuuGGcuGAGucuuGATT B   | 708 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 31380 | MYC:1989L21 siRNA<br>(1971C) stab05     | ucAAGAcucAGccAAGGuuTsT      | 712 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 31383 | MYC:1971U21 siRNA<br>stab07             | B AACcuuGGcuGAGucuuGATT B   | 721 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 31386 | MYC:1989L21 siRNA<br>(1971C) stab11     | ucAAGAcucAGccAAGGuuTsT      | 722 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 31389 | MYC:1971U21 siRNA inv<br>stab04         | B AGuucuGAGucGGuuccAATT B   | 723 |
| MYC | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 31392 | MYC:1989L21 siRNA<br>(1971C) inv stab05 | uuGGAAccGAcuAcAGAAcuTsT     | 724 |

|           |      |                          |     |           |       |   |                            |     |
|-----------|------|--------------------------|-----|-----------|-------|---|----------------------------|-----|
| MYC       | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | sense     | 31395 | MYC:1971U21 siRNA inv<br>stab07         | B AGuucUGAGucGGuuccAAATT B | 725 |
| MYC       | 1969 | ACAACCUUGGCUGAGUCUUGAGA  | 131 | antisense | 31398 | MYC:1989L21 siRNA<br>(1971C) inv stab11 | uuUGGAaccGAcucAGAAcuTsT    | 726 |
| Nogo      | 1043 | UCGUUCAGUGUCUCUCCAAAAGC  | 132 | sense     | 30833 | Nogo:1043U21 siRNA<br>stab04            | B GuucAGuGucucuccAAAAATT B | 727 |
| Nogo      | 1407 | GUUUUGCAGAUAGCCUUGAGCAA  | 133 | sense     | 30834 | Nogo:1407U21 siRNA<br>stab04            | B uuUGcAGAUAGccuuGAGcTT B  | 728 |
| Nogo      | 3211 | AUUCUGCUGCUUUUCAUUGACAG  | 134 | sense     | 30835 | Nogo:3211U21 siRNA<br>stab04            | B uccuGcuGcuuuuAuUGAcTT B  | 729 |
| Nogo      | 3883 | UUGACUGCCAUGUGUUUCAUCAUC | 135 | sense     | 30836 | Nogo:3883U21 siRNA<br>stab04            | B GAcuGccAuGuGuucAucaATT B | 730 |
| Nogo      | 1061 | UCGUUCAGUGUCUCUCCAAAAGC  | 132 | antisense | 30837 | Nogo:1061L21 siRNA<br>(1043C) stab05    | uuuuGGAGAGAGAcuGAAcTsT     | 731 |
| Nogo      | 1425 | GUUUUGCAGAUAGCCUUGAGCAA  | 133 | antisense | 30838 | Nogo:1425L21 siRNA<br>(1407C) stab05    | GcuAAAGGcuAuCuGcAAATsT     | 732 |
| Nogo      | 3229 | AUUCUGCUGCUUUUCAUUGACAG  | 134 | antisense | 30839 | Nogo:3229L21 siRNA<br>(3211C) stab05    | GucAAuGAAAGcAGcAGGATsT     | 733 |
| Nogo      | 3901 | UUGACUGCCAUGUGUUUCAUCAUC | 135 | antisense | 30840 | Nogo:3901L21 siRNA<br>(3883C) stab05    | uGAUGAAcAcAuGGcAGucTsT     | 734 |
| NOGO<br>R | 510  | CCUGCAGUACCUCUACCUGCAG   | 136 | sense     | 31057 | NogoR:512U21 siRNA                      | CUGCAGUACCUCUACCUGCCTT     | 735 |
| NOGO<br>R | 660  | ACCGUCUCCUACUGCACCAGAAC  | 137 | sense     | 31058 | NogoR:662U21 siRNA                      | CGUCUCCUACUGCACCAGATT      | 736 |
| NOGO<br>R | 1084 | ACUGGAGCCUGGAAGACCAGCUU  | 138 | sense     | 31059 | NogoR:1086U21 siRNA                     | UGGAGCCUGGAAGACCAGCCTT     | 737 |
| NOGO<br>R | 1369 | UGGUGACUCAGAAGGCUCAGGUG  | 139 | sense     | 31060 | NogoR:1371U21 siRNA                     | GUGACUCAGAAGGCUCAGGTT      | 738 |
| NOGO<br>R | 510  | CCUGCAGUACCUCUACCUGCAG   | 136 | antisense | 31133 | NogoR:530L21 siRNA<br>(512C)            | GCAGGUAGAGGUACUGCAGTT      | 739 |
| NOGO<br>R | 660  | ACCGUCUCCUACUGCACCAGAAC  | 137 | antisense | 31134 | NogoR:680L21 siRNA<br>(662C)            | UCUGGUGCAGUAGGAGACGTT      | 740 |
| NOGO<br>R | 1084 | ACUGGAGCCUGGAAGACCAGCUU  | 138 | antisense | 31135 | NogoR:1104L21 siRNA<br>(1086C)          | GCUGGUCUUCUCCAGGCUCUCCATT  | 741 |
| NOGO<br>R | 1369 | UGGUGACUCAGAAGGCUCAGGUG  | 139 | antisense | 31136 | NogoR:1389L21 siRNA<br>(1371C)          | CCUGAGCCUUCUGAGUCACCTT     | 742 |
| PCNA      | 548  | UUUGCAGUAUAUAGCCGAGAUUCU | 140 | sense     | 30841 | PCNA:550U21 siRNA<br>stab04             | B uGcAcGuAuAuGccGAGAuTT B  | 743 |
| PCNA      | 572  | AGCCAUUUGGAGAUUGCUGUUGU  | 141 | sense     | 30842 | PCNA:574U21 siRNA<br>stab04             | B ccAuAuUGGAGAUgcuGuuTT B  | 744 |
| PCNA      | 837  | AAUUGCGGAUAUUGGACACUUA   | 142 | sense     | 30844 | PCNA:839U21 siRNA<br>stab04             | B AuUGcGGAUuUGGAGAcuTT B   | 745 |

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|      |      |                          |     |           |       |  |                            |     |
|------|------|--------------------------|-----|-----------|-------|--|----------------------------|-----|
| PCNA | 548  | UUUGCACGUUAUUGCCGAGAUUCU | 140 | antisense | 30845 | PCNA:568L21 siRNA<br>(550C) stab05     | AucucGGcAuAuAcGuGcATsT     | 746 |
| PCNA | 572  | AGCCAUUUUGGAGAUUGCUGUUGU | 141 | antisense | 30846 | PCNA:592L21 siRNA<br>(574C) stab05     | AAcAGcAucccAAuAuGGTsT      | 747 |
| PCNA | 837  | AAUUUGCGGAUAUUGGGACACUUA | 142 | antisense | 30848 | PCNA:857L21 siRNA<br>(839C) stab05     | AGuGucccAuAuuccGcAAuTsT    | 748 |
| PCNA | 548  | UUUGCACGUUAUUGCCGAGAUUCU | 140 | sense     | 31033 | PCNA:550U21 siRNA                      | UGCACGUUAUUGCCGAGAUUT      | 749 |
| PCNA | 572  | AGCCAUUUUGGAGAUUGCUGUUGU | 141 | sense     | 31034 | PCNA:574U21 siRNA                      | CCAUUUUGGAGAUUGCUGUUT      | 750 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | sense     | 31035 | PCNA:767U21 siRNA                      | AAAGCCACUCCACUCUCUUT       | 751 |
| PCNA | 837  | AAUUUGCGGAUAUUGGGACACUUA | 142 | sense     | 31036 | PCNA:839U21 siRNA                      | AUUGCGGAUAUUGGGACACUUT     | 752 |
| PCNA | 548  | UUUGCACGUUAUUGCCGAGAUUCU | 140 | antisense | 31109 | PCNA:568L21 siRNA<br>(550C)            | AUCUGCGCAUAUACGUGCATT      | 753 |
| PCNA | 572  | AGCCAUUUUGGAGAUUGCUGUUGU | 141 | antisense | 31110 | PCNA:592L21 siRNA<br>(574C)            | AACAGCAUCUCUCCAAUAUGGTT    | 754 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | antisense | 31111 | PCNA:785L21 siRNA<br>(767C)            | AAGAGAGUGGAGUGGCUUUT       | 755 |
| PCNA | 837  | AAUUUGCGGAUAUUGGGACACUUA | 142 | antisense | 31112 | PCNA:857L21 siRNA<br>(839C)            | AGUGUCCCAUAUCCGCAAUUT      | 756 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | sense     | 31310 | PCNA:767U21 siRNA<br>stab04            | B AAAGccAcuccAcucucuuTT B  | 757 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | antisense | 31311 | PCNA:785L21 siRNA<br>(767C) stab05     | AAGAGAGUGGAGUGGCUuuTsT     | 758 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | sense     | 31322 | PCNA:767U21 siRNA inv<br>stab04        | B uuucucAcuccAcccGAAATT B  | 759 |
| PCNA | 765  | CAAAAGCCACUCCACUCUCUUA   | 143 | antisense | 31323 | PCNA:785L21 siRNA<br>(767C) inv stab05 | uuucGGUGAGGuGAGAGAAATsT    | 760 |
| PKR  | 533  | UUCAGGACCUCCACAUAGUAAGGA | 144 | sense     | 30969 | PKR:533U21 siRNA<br>stab04             | B cAGGAGccuccAcAuGAuAGTT B | 761 |
| PKR  | 533  | UUCAGGACCUCCACAUAGUAAGGA | 144 | sense     | 30969 | PKR:533U21 siRNA<br>stab04             | B cAGGAGccuccAcAuGAuAGTT B | 761 |
| PKR  | 1171 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30970 | PKR:1171U21 siRNA<br>stab04            | B AGAuuuGAccuuuccuGAcATT B | 762 |
| PKR  | 1171 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30970 | PKR:1171U21 siRNA<br>stab04            | B AGAuuuGAccuuuccuGAcATT B | 762 |
| PKR  | 1171 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30970 | PKR:1171U21 siRNA<br>stab04            | B AGAuuuGAccuuuccuGAcATT B | 762 |
| PKR  | 1171 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30970 | PKR:1171U21 siRNA<br>stab04            | B AGAuuuGAccuuuccuGAcATT B | 762 |
| PKR  | 2430 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30971 | PKR:2430U21 siRNA<br>stab04            | B uGAGuAGcuGGAuuAcAGGTT B  | 763 |
| PKR  | 2430 | AACAACCCACAAAAUACAACAAGA | 57  | sense     | 30971 | PKR:2430U21 siRNA<br>stab04            | B uGAGuAGcuGGAuuAcAGGTT B  | 763 |

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|       |      |                           |     |           |       |                                       |                            |     |
|-------|------|---------------------------|-----|-----------|-------|---------------------------------------|----------------------------|-----|
| PKR   | 2518 | AAACAACCACAAAAUAACAACAAGA | 57  | sense     | 30972 | PKR:2518U21 siRNA<br>stab04           | B GGucucAAAAuccuGAccuTT B  | 764 |
| PKR   | 2518 | AAACAACCACAAAAUAACAACAAGA | 57  | sense     | 30972 | PKR:2518U21 siRNA<br>stab04           | B GGucucAAAAuccuGAccuTT B  | 764 |
| PKR   | 551  | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30973 | PKR:551L21 siRNA<br>(533C) stab05     | cuAucAuGuGGAGGuccuGTsT     | 765 |
| PKR   | 551  | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30973 | PKR:551L21 siRNA<br>(533C) stab05     | cuAucAuGuGGAGGuccuGTsT     | 765 |
| PKR   | 1189 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30974 | PKR:1189L21 siRNA<br>(1171C) stab05   | uGucAGGAAGGucAAuAucTTsT    | 766 |
| PKR   | 1189 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30974 | PKR:1189L21 siRNA<br>(1171C) stab05   | uGucAGGAAGGucAAuAucTTsT    | 766 |
| PKR   | 2448 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30975 | PKR:2448L21 siRNA<br>(2430C) stab05   | ccuGuAAuccAGcuAcucATsT     | 767 |
| PKR   | 2448 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30975 | PKR:2448L21 siRNA<br>(2430C) stab05   | ccuGuAAuccAGcuAcucATsT     | 767 |
| PKR   | 2536 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30976 | PKR:2536L21 siRNA<br>(2518C) stab05   | AGGucAGGAGuuGAGAccTsT      | 768 |
| PKR   | 2536 | AAACAACCACAAAAUAACAACAAGA | 57  | antisense | 30976 | PKR:2536L21 siRNA<br>(2518C) stab05   | AGGucAGGAGuuGAGAccTsT      | 768 |
| PRKCA | 517  | CUAAAGGCUGAGGUUGCUGAUGA   | 145 | sense     | 30713 | PRKCA:519U21 siRNA<br>stab04          | B AAAGGcuGAGGuuGcuGauTT B  | 769 |
| PRKCA | 998  | GGAAACAACCUUCCAAACAACCUU  | 146 | sense     | 30714 | PRKCA:1000U21 siRNA<br>stab04         | B AAACAACcuuccAAACAaccTT B | 770 |
| PRKCA | 1734 | CAAAGGACUGAUGACCACCAACACC | 147 | sense     | 30716 | PRKCA:1736U21 siRNA<br>stab04         | B AAGGAcuGauGAccAAAAcATT B | 771 |
| PRKCA | 517  | CUAAAGGCUGAGGUUGCUGAUGA   | 145 | antisense | 30717 | PRKCA:537L21 siRNA<br>(519C) stab05   | AucAGcAAccucAGccuuTsT      | 772 |
| PRKCA | 998  | GGAAACAACCUUCCAAACAACCUU  | 146 | antisense | 30718 | PRKCA:1018L21 siRNA<br>(1000C) stab05 | GGuuGuuGGAAAGGuuGuuTsT     | 773 |
| PRKCA | 1734 | CAAAGGACUGAUGACCACCAACACC | 147 | antisense | 30720 | PRKCA:1754L21 siRNA<br>(1736C) stab05 | uGuuuGGucAucAGuccuuTsT     | 774 |
| PRKCA | 517  | CUAAAGGCUGAGGUUGCUGAUGA   | 145 | sense     | 30989 | PRKCA:519U21 siRNA                    | AAAGGCUGAGGUUGCUGAUTT      | 775 |
| PRKCA | 998  | GGAAACAACCUUCCAAACAACCUU  | 146 | sense     | 30990 | PRKCA:1000U21 siRNA                   | AAACAACCUUCCAAACAACCTT     | 776 |
| PRKCA | 1141 | AAGGAUGUGGUAUUCAGGAUGA    | 148 | sense     | 30991 | PRKCA:1143U21 siRNA                   | GGAUGUGGUAUUCAGGAUTT       | 777 |
| PRKCA | 1734 | CAAAGGACUGAUGACCACCAACACC | 147 | sense     | 30992 | PRKCA:1736U21 siRNA                   | AAGGACUGAUGACCACCAACATT    | 778 |
| PRKCA | 517  | CUAAAGGCUGAGGUUGCUGAUGA   | 145 | antisense | 31065 | PRKCA:537L21 siRNA<br>(519C)          | AUCAGCAACCUACAGCCUUUTT     | 779 |
| PRKCA | 998  | GGAAACAACCUUCCAAACAACCUU  | 146 | antisense | 31066 | PRKCA:1018L21 siRNA<br>(1000C)        | GGUUGUUGGAAGGUUGUUUTT      | 780 |
| PRKCA | 1141 | AAGGAUGUGGUAUUCAGGAUGA    | 148 | antisense | 31067 | PRKCA:1161L21 siRNA<br>(1143C)        | AUCCUGAAUACACCACAUCCTT     | 781 |

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|            |      |                          |     |           |       |   |                            |     |
|------------|------|--------------------------|-----|-----------|-------|---|----------------------------|-----|
| PRKCA      | 1734 | CAAAGGACUGAUGACCAAAACACC | 147 | antisense | 31068 | PRKCA:1754L21 siRNA<br>(1736C)            | UGUUUGGUCAUCAGUCCUUTT      | 782 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | sense     | 31376 | PRKCA:1143U21 siRNA<br>stab04             | B GGauGuGGuGAuucAGGAUtt B  | 783 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | antisense | 31379 | PRKCA:1161L21 siRNA<br>(1143C) stab05     | AuccuGAAuucAccAcAuccTsT    | 784 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | sense     | 31382 | PRKCA:1143U21 siRNA<br>stab07             | B GGauGuGGuGAuucAGGAUtt B  | 785 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | antisense | 31385 | PRKCA:1161L21 siRNA<br>(1143C) stab11     | AuccuGAAuucAccAcAuccTsT    | 786 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | sense     | 31388 | PRKCA:1143U21 siRNA<br>inv stab04         | B uAGGAcuuAGuGGuGuAGGTT B  | 787 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | antisense | 31391 | PRKCA:1161L21 siRNA<br>(1143C) inv stab05 | ccuAcAccAcuAAuGuccuATsT    | 788 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | sense     | 31394 | PRKCA:1143U21 siRNA<br>inv stab07         | B uAGGAcuuAGuGGuGuAGGTT B  | 789 |
| PRKCA      | 1141 | AAGGAUGUGGUGAUUCAGGAUGA  | 148 | antisense | 31397 | PRKCA:1161L21 siRNA<br>(1143C) inv stab11 | ccuAcAccAcuAAuGuccuATsT    | 790 |
| PTP4A<br>3 | 205  | AUCUCGUUUCUCUUGGACAAGCA  | 149 | sense     | 31557 | PTP4A3:205U21 siRNA                       | CUCGUUUUCUCUUGGACAAGTT     | 791 |
| PTP4A<br>3 | 367  | GAGGUGAGCUACAAACACAUGCG  | 150 | sense     | 31558 | PTP4A3:367U21 siRNA                       | GGUGAGCUACAAACACAUGTT      | 792 |
| PTP4A<br>3 | 574  | GUAGUGGAAGACUGGCUGAGCCU  | 151 | sense     | 31559 | PTP4A3:574U21 siRNA                       | AGUGGAAGACUGGCUGAGCTT      | 793 |
| PTP4A<br>3 | 1168 | CUCCUCUAGCCUGUUUGUUGUGG  | 152 | sense     | 31560 | PTP4A3:1168U21 siRNA                      | CCUCUAGCCUGUUUGUUGUTT      | 794 |
| PTP4A<br>3 | 223  | AUCUCGUUUCUCUUGGACAAGCA  | 149 | antisense | 31561 | PTP4A3:223L21 siRNA<br>(205C)             | CUUGUCCAAGAGAAAACGAGTT     | 795 |
| PTP4A<br>3 | 385  | GAGGUGAGCUACAAACACAUGCG  | 150 | antisense | 31562 | PTP4A3:385L21 siRNA<br>(367C)             | CAUGUGUUUGUAGCUCACCTT      | 796 |
| PTP4A<br>3 | 592  | GUAGUGGAAGACUGGCUGAGCCU  | 151 | antisense | 31563 | PTP4A3:592L21 siRNA<br>(574C)             | GCUCAGCCAGUCUUCACCTT       | 797 |
| PTP4A<br>3 | 1186 | CUCCUCUAGCCUGUUUGUUGUGG  | 152 | antisense | 31564 | PTP4A3:1186L21 siRNA<br>(1168C)           | ACAACAAACAGGCUAGAGTT       | 798 |
| PTPN1      | 240  | UAUCCGACAUGAAGCCAGUGACU  | 153 | sense     | 30865 | PTPN1:242U21 siRNA<br>stab04              | B uccGACAuGAAGccAGuGATT B  | 799 |
| PTPN1      | 872  | UGCUGAUGGACAAGAGGAAAGAC  | 154 | sense     | 30867 | PTPN1:874U21 siRNA<br>stab04              | B cuGAUGGACAAGAGGAAAGTT B  | 800 |
| PTPN1      | 3035 | AGGUGUGGAUAAAGGCUUAGGUGC | 155 | sense     | 30868 | PTPN1:3037U21 siRNA<br>stab04             | B GuGuGGAuAAAGGcuuAGGuTT B | 801 |
| PTPN1      | 240  | UAUCCGACAUGAAGCCAGUGACU  | 153 | antisense | 30869 | PTPN1:260L21 siRNA<br>(242C) stab05       | ucAcuGGcuucAuGucGGATsT     | 802 |

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|       |      |                          |     |           |       |   |                            |     |
|-------|------|--------------------------|-----|-----------|-------|---|----------------------------|-----|
| PTPN1 | 872  | UGCUGAUGGACAAGAGGAAAGAC  | 154 | antisense | 30871 | PTPN1:892L21 siRNA<br>(874C) slab05     | CUUUCCUUUGuccAucAGTsT      | 803 |
| PTPN1 | 3035 | AGGUGUGGAUAAAGGCUUAGGUGC | 155 | antisense | 30872 | PTPN1:3055L21 siRNA<br>(3037C) slab05   | AccuAAGccuuAuccAcAcTsT     | 804 |
| PTPN1 | 240  | UAUCCGACAUGAAGCCAGUGACU  | 153 | sense     | 31017 | PTPN1:242U21 siRNA                      | UCCGACAUGAAGCCAGUGATT      | 805 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | sense     | 31018 | PTPN1:766U21 siRNA                      | GUCCGAGAGUCAGGGUCACCT      | 806 |
| PTPN1 | 872  | UGCUGAUGGACAAGAGGAAAGAC  | 154 | sense     | 31019 | PTPN1:874U21 siRNA                      | CUGAUGGACAAGAGGAAAGTT      | 807 |
| PTPN1 | 3035 | AGGUGUGGAUAAAGGCUUAGGUGC | 155 | sense     | 31020 | PTPN1:3037U21 siRNA                     | GUGUGGAUAAAGGCUUAGGUTT     | 808 |
| PTPN1 | 240  | UAUCCGACAUGAAGCCAGUGACU  | 153 | antisense | 31093 | PTPN1:260L21 siRNA<br>(242C)            | UCACUGGCUUUCUAGUCGGATT     | 809 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | antisense | 31094 | PTPN1:784L21 siRNA<br>(766C)            | GUGACCCUGACUCUCGGACTT      | 810 |
| PTPN1 | 872  | UGCUGAUGGACAAGAGGAAAGAC  | 154 | antisense | 31095 | PTPN1:892L21 siRNA<br>(874C)            | CUUCCUCUUUGUCCAUACAGTT     | 811 |
| PTPN1 | 3035 | AGGUGUGGAUAAAGGCUUAGGUGC | 155 | antisense | 31096 | PTPN1:3055L21 siRNA<br>(3037C)          | ACCUAAGCCUUAUCCACACTT      | 812 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | sense     | 31306 | PTPN1:766U21 siRNA<br>slab04            | B GuccGAGAGucAGGGGucAcTT B | 813 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | antisense | 31307 | PTPN1:784L21 siRNA<br>(766C) slab05     | GuGAcccuGAcucucGGAcTsT     | 814 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | sense     | 31318 | PTPN1:766U21 siRNA inv<br>slab04        | B cAcuGGGAcuGAGAGccuGTT B  | 815 |
| PTPN1 | 764  | AAGUCCGAGAGUCAGGGUCACUC  | 156 | antisense | 31319 | PTPN1:784L21 siRNA<br>(766C) inv slab05 | cAGGcucucAGucccAGuGTsT     | 816 |
| RAF1  | 1326 | AAACACGGCAUGUGAACAUCU    | 157 | sense     | 31549 | RAF1:1326U21 siRNA                      | AACACGGCAUGUGAACAUCUTT     | 817 |
| RAF1  | 1415 | CCUCUACAAACACCCUGCAUGUCC | 158 | sense     | 31550 | RAF1:1415U21 siRNA                      | UCUACAAACACCCUGCAUGUTT     | 818 |
| RAF1  | 1776 | UCUCACAUCAACAACCCGAGAUCA | 159 | sense     | 31551 | RAF1:1776U21 siRNA                      | UCACAUCAACAACCCGAGAUUTT    | 819 |
| RAF1  | 2854 | CAAGGAAGCCAGGAUAACAGGUU  | 160 | sense     | 31552 | RAF1:2854U21 siRNA                      | AGGAAGCCAGGAUAACAGGTT      | 820 |
| RAF1  | 1344 | AAACACGGCAUGUGAACAUCU    | 157 | antisense | 31553 | RAF1:1344L21 siRNA<br>(1326C)           | AAUGUUCACAUGCCGUGUUTT      | 821 |
| RAF1  | 1433 | CCUCUACAAACACCCUGCAUGUCC | 158 | antisense | 31554 | RAF1:1433L21 siRNA<br>(1415C)           | ACAUGCAGGUGUUUGUAGATT      | 822 |
| RAF1  | 1794 | UCUCACAUCAACAACCCGAGAUCA | 159 | antisense | 31555 | RAF1:1794L21 siRNA<br>(1776C)           | AUCUCGGUUGUUGAUGUGATT      | 823 |
| RAF1  | 2872 | CAAGGAAGCCAGGAUAACAGGUU  | 160 | antisense | 31556 | RAF1:2872L21 siRNA<br>(2854C)           | CCUGUAUUCUCCUGGCUUCCUTT    | 824 |
| RELA  | 144  | GAGAGGACACAGAUACCCACCAA  | 161 | sense     | 31029 | RelA:146U21 siRNA                       | GAGGACACAGAUACCCACTT       | 825 |
| RELA  | 288  | GAUGGCUUCUAUGAGGCGUGAGU  | 162 | sense     | 31030 | RelA:290U21 siRNA                       | UGGCUUCUAUGAGGCGUGATT      | 826 |
| RELA  | 643  | UGUGAGACAAGGUGCAGAAAGAG  | 163 | sense     | 31031 | RelA:645U21 siRNA                       | UGUGACAAGGUGCAGAAAGTT      | 827 |
| RELA  | 1955 | UCCUCCAGCUUCUGGUACUCUCC  | 164 | sense     | 31032 | RelA:1957U21 siRNA                      | CUCCAGCUUCUGGUACUCUTT      | 828 |
| RELA  | 144  | GAGAGGACACAGAUACCCACCAA  | 161 | antisense | 31105 | RelA:164L21 siRNA                       | GGUGGUAUCUCUGUGCUCCUCTT    | 829 |

|      |      |                           |     |           |       |  |                             |     |
|------|------|---------------------------|-----|-----------|-------|--|-----------------------------|-----|
| RELA | 288  | GAUGGCUUCUAUGAGGCGUGAGCU  | 162 | antisense | 31106 | (146C)<br>RelA:308L21 siRNA<br>(290C)    | CUCAGCCUCUAUAGAAGCCATT      | 830 |
| RELA | 643  | UGUGUGACAAAGGUGCAGAAAAGAG | 163 | antisense | 31107 | RelA:663L21 siRNA<br>(645C)              | CUUUCUGCACCUUUGUCACATT      | 831 |
| RELA | 1955 | UCCUCCAGCUUCUGGUACUCUCC   | 164 | antisense | 31108 | RelA:1975L21 siRNA<br>(1957C)            | AGAGUACCCAGAAGCGUGGAGTT     | 832 |
| RELA | 1955 | UCCUCCAGCUUCUGGUACUCUCC   | 164 | sense     | 31308 | RelA:1957U21 siRNA<br>stab04             | B cuccAGcuucuuGGuAcucuTT B  | 833 |
| RELA | 1955 | UCCUCCAGCUUCUGGUACUCUCC   | 164 | antisense | 31309 | RelA:1975L21 siRNA<br>(1957C) stab05     | AGAGuAccAGAAAGcuGGAGTsT     | 834 |
| RELA | 1955 | UCCUCCAGCUUCUGGUACUCUCC   | 164 | sense     | 31320 | RELA:1957U21 siRNA inv<br>stab04         | B ucucAuGGucuuuGAccucTT B   | 835 |
| RELA | 1955 | UCCUCCAGCUUCUGGUACUCUCC   | 164 | antisense | 31321 | RELA:1975L21 siRNA<br>(1957C) inv stab05 | GAGGucGAAAGAccAuGAGATsT     | 836 |
| SCD  | 993  | GAUAUGCUGUGGUGCUUAAUGCC   | 165 | sense     | 30873 | SCD:995U21 siRNA<br>stab04               | B uAuGcuGuGGuGcuuAAuGTT B   | 837 |
| SCD  | 2518 | ACUGCUGGACAUGAGAUGGAGAG   | 166 | sense     | 30874 | SCD:2520U21 siRNA<br>stab04              | B uGcuGGAcAuGAGuGGAGTT B    | 838 |
| SCD  | 3783 | UAGAGGCUACAGGGGUUAGCCUG   | 167 | sense     | 30875 | SCD:3785U21 siRNA<br>stab04              | B GAGGcuAcAGGGGUuAGccTT B   | 839 |
| SCD  | 4772 | CUGACCUACCUCAAAAGGGCAGUU  | 168 | sense     | 30876 | SCD:4774U21 siRNA<br>stab04              | B GAcuuAccucAAAAGGGGcAGTT B | 840 |
| SCD  | 993  | GAUAUGCUGUGGUGCUUAAUGCC   | 165 | antisense | 30877 | SCD:1013L21 siRNA<br>(995C) stab05       | cAuuuAAGcAccAcAGcAuATsT     | 841 |
| SCD  | 2518 | ACUGCUGGACAUGAGAUGGAGAG   | 166 | antisense | 30878 | SCD:2538L21 siRNA<br>(2520C) stab05      | cuccAuucucAuGuccAGcATsT     | 842 |
| SCD  | 3783 | UAGAGGCUACAGGGGUUAGCCUG   | 167 | antisense | 30879 | SCD:3803L21 siRNA<br>(3785C) stab05      | GGcuAAcccuGuuAGccucTsT      | 843 |
| SCD  | 4772 | CUGACCUACCUCAAAAGGGCAGUU  | 168 | antisense | 30880 | SCD:4792L21 siRNA<br>(4774C) stab05      | cuGccuuuuGAGGuuAGGucTsT     | 844 |
| SCD  | 993  | GAUAUGCUGUGGUGCUUAAUGCC   | 165 | sense     | 31021 | SCD:995U21 siRNA                         | UAUGCUGUGGUGCUUAAUGTT       | 845 |
| SCD  | 2518 | ACUGCUGGACAUGAGAUGGAGAG   | 166 | sense     | 31022 | SCD:2520U21 siRNA                        | UGCUGGACAUGAGAUGGAGTT       | 846 |
| SCD  | 3783 | UAGAGGCUACAGGGGUUAGCCUG   | 167 | sense     | 31023 | SCD:3785U21 siRNA                        | GAGGCUACAGGGGUUAGCCTT       | 847 |
| SCD  | 4772 | CUGACCUACCUCAAAAGGGCAGUU  | 168 | sense     | 31024 | SCD:4774U21 siRNA                        | GACCUACCUCAAAGGGGcAGTT      | 848 |
| SCD  | 993  | GAUAUGCUGUGGUGCUUAAUGCC   | 165 | antisense | 31097 | SCD:1013L21 siRNA<br>(995C)              | CAUUAAGCACCCACAGCAUATT      | 849 |
| SCD  | 2518 | ACUGCUGGACAUGAGAUGGAGAG   | 166 | antisense | 31098 | SCD:2538L21 siRNA<br>(2520C)             | CUCCAUCUCAUGUCCAGCATT       | 850 |
| SCD  | 3783 | UAGAGGCUACAGGGGUUAGCCUG   | 167 | antisense | 31099 | SCD:3803L21 siRNA<br>(3785C)             | GGCUAACCCCUUGUAGCCUUCTT     | 851 |



|       |      |                           |     |           |       |                                      |                            |     |
|-------|------|---------------------------|-----|-----------|-------|--------------------------------------|----------------------------|-----|
| SCD   | 4772 | CUGACCUACCUCUAAAAGGGCAGUU | 168 | antisense | 31100 | SCD:4792L21 siRNA<br>(4774C)         | CUGCCCCUUUGAGGUAGGUCU      | 852 |
| TERT  | 17   | CUGCGACGUGGGAAGCCUUGGC    | 169 | sense     | 29960 | TERT:19U21 siRNA                     | GCGCACGUGGGAAAGCCUUGGC     | 853 |
| TERT  | 309  | UGCAGAGCUGUGCAGCGCGGC     | 170 | sense     | 29961 | TERT:311U21 siRNA                    | CAGAGCUGUGCGAGCGCGGC       | 854 |
| TERT  | 641  | CGUCUGGGAUGCGAACGGGCCUG   | 171 | sense     | 29962 | TERT:643U21 siRNA                    | UCUGGAUGCGAACGGGCCUG       | 855 |
| TERT  | 1244 | CUUGGGAACACGCGCAGUGCCC    | 172 | sense     | 29963 | TERT:1248U21 siRNA                   | UGGGAACACGCGCAGUGCCC       | 856 |
| TERT  | 2495 | UGCCACACGCGUGGCAUCAG      | 173 | sense     | 29964 | TERT:2497U21 siRNA                   | CCACCACGCGUGGCAUCAG        | 857 |
| TERT  | 17   | CUGCGACGUGGGAAGCCUUGGC    | 169 | antisense | 29965 | TERT:39L21 siRNA (19C)               | CAGGCUUCCACGUGCGCAG        | 858 |
| TERT  | 309  | UGCAGAGCUGUGCGAGCGCGGC    | 170 | antisense | 29966 | TERT:331L21 siRNA<br>(311C)          | CGCGCUCGCACAGCCUCUGCA      | 859 |
| TERT  | 641  | CGUCUGGGAUGCGAACGGGCCUG   | 171 | antisense | 29967 | TERT:663L21 siRNA<br>(643C)          | GGCCCGUUCGCAUCCACAGCG      | 860 |
| TERT  | 1244 | CUUGGGAACACGCGCAGUGCCC    | 172 | antisense | 29968 | TERT:1266L21 siRNA<br>(1246C)        | GCACUGCGCGUGGUUCCCAAG      | 861 |
| TERT  | 2495 | UGCCACACGCGUGGCAUCAG      | 173 | antisense | 29969 | TERT:2517L21 siRNA<br>(2497C)        | GAUGCGCACGGCGUGGUGGCA      | 862 |
| TERT  | 1136 | GUGGAGACCAUCUUUCUGGGUUC   | 174 | sense     | 30905 | TERT:1138U21 siRNA<br>stab04         | B GGAGAccAucuuuucUGGuTT B  | 863 |
| TERT  | 1790 | AGUGUCUGGAGCAAGUUGCAAAG   | 175 | sense     | 30906 | TERT:1792U21 siRNA<br>stab04         | B uGucuGGAGcAAGuuGcAATT B  | 864 |
| TERT  | 2915 | AUCAGAGCCAGUCACACCUUCAA   | 176 | sense     | 30907 | TERT:2917U21 siRNA<br>stab04         | B cAGAGccAGucucAccuucTT B  | 865 |
| TERT  | 2994 | UGAAGUGUCACAGCCUGUUUCUG   | 177 | sense     | 30908 | TERT:2996U21 siRNA<br>stab04         | B AAGuGuAcAcAGccuGuuucTT B | 866 |
| TERT  | 1136 | GUGGAGACCAUCUUUCUGGGUUC   | 174 | antisense | 30909 | TERT:1156L21 siRNA<br>(1138C) stab05 | AcccAGAAAAGuGGucuccTsT     | 867 |
| TERT  | 1790 | AGUGUCUGGAGCAAGUUGCAAAG   | 175 | antisense | 30910 | TERT:1810L21 siRNA<br>(1792C) stab05 | uuGcAAcuuGcuccAGAcATsT     | 868 |
| TERT  | 2915 | AUCAGAGCCAGUCACACCUUCAA   | 176 | antisense | 30911 | TERT:2935L21 siRNA<br>(2917C) stab05 | GAAGGuGAGAcuGGcucuGTsT     | 869 |
| TERT  | 2994 | UGAAGUGUCACAGCCUGUUUCUG   | 177 | antisense | 30912 | TERT:3014L21 siRNA<br>(2996C) stab05 | GAAAcAGGcuGuGAcAcuuTsT     | 870 |
| TGFB1 | 1526 | AGGGAUAAACACACUGCAAGUGGA  | 178 | sense     | 30881 | TGFB:1528U21 siRNA<br>stab04         | B GGAUAACAcuGcAAGuGTT B    | 871 |
| TGFB1 | 2383 | CCAUAGCAACACUCUGAGAUGGC   | 179 | sense     | 30882 | TGFB:2385U21 siRNA<br>stab04         | B AuAGcAAcAcucuGAGAuGTT B  | 872 |
| TGFB1 | 2484 | GAACCUUGCUUAGUGGGGGAUAG   | 180 | sense     | 30883 | TGFB:2486U21 siRNA<br>stab04         | B AccuGcuuuAGUGGGGGAuTT B  | 873 |
| TGFB1 | 2566 | UAGCACUUUUGGGAGGCAGAGAU   | 181 | sense     | 30884 | TGFB:2568U21 siRNA<br>stab04         | B GcAcuuuuGGGAGGCAGAGTT B  | 874 |
| TGFB1 | 1526 | AGGGAUAAACACACUGCAAGUGGA  | 178 | antisense | 30885 | TGFB:1546L21 siRNA                   | cAuuGcAGuGuuAuuccTsT       | 875 |

|       |      |                           |     |           |       |                                      |                            |     |
|-------|------|---------------------------|-----|-----------|-------|--------------------------------------|----------------------------|-----|
| TGFB1 | 2383 | CCAUAGCAACACACUCUGAGAUGGC | 179 | antisense | 30886 | (1528C) stab05                       | cAucucAGAGuGuuGcuAuTsT     | 876 |
| TGFB1 | 2484 | GAACCUUCUUUAGUGGGGAUAG    | 180 | antisense | 30887 | TGfb:2403L21 siRNA<br>(2385C) stab05 | AucccccAcuAAAAGcAGGuTsT    | 877 |
| TGFB1 | 2566 | UAGCACUUUUGGGAGGCAGAGAU   | 181 | antisense | 30888 | TGfb:2504L21 siRNA<br>(2486C) stab05 | cucuGccucccAAAAAGuGcTsT    | 878 |
| TGFB1 | 1526 | AGGGAUAACACACUCGAAGUGGA   | 178 | sense     | 31053 | TGfb:2586L21 siRNA<br>(2568C) stab05 | GGUAACACACACUGCAAGUGTT     | 879 |
| TGFB1 | 2383 | CCAUAGCAACACUCUGAGAUGGC   | 179 | sense     | 31054 | TGfb:1528U21 siRNA                   | AUAGCAACACUCUCAGAGUUTT     | 880 |
| TGFB1 | 2484 | GAACCUUCUUUAGUGGGGAUAG    | 180 | sense     | 31055 | TGfb:2385U21 siRNA                   | ACCUGCUUUAGUGGGGAUUTT      | 881 |
| TGFB1 | 2566 | UAGCACUUUUGGGAGGCAGAGAU   | 181 | sense     | 31056 | TGfb:2486U21 siRNA                   | GCACUUUUGGGAGGCAGAGTT      | 882 |
| TGFB1 | 1526 | AGGGAUAACACACUCGAAGUGGA   | 178 | antisense | 31129 | TGfb:2568U21 siRNA<br>(1528C)        | CACUUGCAGUGUGUUUAUCCTT     | 883 |
| TGFB1 | 2383 | CCAUAGCAACACUCUGAGAUGGC   | 179 | antisense | 31130 | TGfb:1546L21 siRNA<br>(2385C)        | CAUCUCAGAGUGUUGCUAUTT      | 884 |
| TGFB1 | 2484 | GAACCUUCUUUAGUGGGGAUAG    | 180 | antisense | 31131 | TGfb:2403L21 siRNA<br>(2486C)        | AUCCCCCACUAAAAGCAGGUTT     | 885 |
| TGFB1 | 2566 | UAGCACUUUUGGGAGGCAGAGAU   | 181 | antisense | 31132 | TGfb:2504L21 siRNA<br>(2568C)        | CUCUGCCUCCCCAAAAGUGCCTT    | 886 |
| TNF   | 77   | AAGGACACCAUGAGCACUGAAAG   | 182 | sense     | 30889 | TGfb:2586L21 siRNA<br>(2568C)        | B GGAcAcAuGAGcAcuGAAATT B  | 887 |
| TNF   | 176  | UUGUUCUUCAGCCUCUUCUCCUU   | 183 | sense     | 30890 | TNFa:79U21 siRNA<br>stab04           | B GuuccucAGccucuuuccTT B   | 888 |
| TNF   | 568  | CUCCUACCAGACCAAGGUCAACC   | 184 | sense     | 30891 | TNFa:178U21 siRNA<br>stab04          | B ccuAccAGAccAAGGGuCAATT B | 889 |
| TNF   | 1150 | UUAGGCCUUCCUCUCCAGAU      | 185 | sense     | 30892 | TNFa:570U21 siRNA<br>stab04          | B AGGccuuuccucucccAGATT B  | 890 |
| TNF   | 77   | AAGGACACCAUGAGCACUGAAAG   | 182 | antisense | 30893 | TNFa:1152U21 siRNA<br>stab05         | uucAGuGcuAuGGuGuccTsT      | 891 |
| TNF   | 176  | UUGUUCUUCAGCCUCUUCUCCUU   | 183 | antisense | 30894 | TNFa:97L21 siRNA (79C)<br>stab05     | GGAGAAAGAGGcuGAGGAACtsT    | 892 |
| TNF   | 568  | CUCCUACCAGACCAAGGUCAACC   | 184 | antisense | 30895 | TNFa:196L21 siRNA<br>(178C) stab05   | uuGAGccuuGGucuGGuAGGTsT    | 893 |
| TNF   | 1150 | UUAGGCCUUCCUCUCCAGAU      | 185 | antisense | 30896 | TNFa:588L21 siRNA<br>(570C) stab05   | ucuGGAGAGAGGAAGGccuTsT     | 894 |
| TNF   | 77   | AAGGACACCAUGAGCACUGAAAG   | 182 | sense     | 31408 | TNFa:1170L21 siRNA<br>(1152C) stab05 | GGACACCAUGAGCACUGAAATT     | 895 |
| TNF   | 176  | UUGUUCUUCAGCCUCUUCUCCUU   | 183 | sense     | 31409 | TNFa:79U21 siRNA                     | GUUCCUCAGCCUCUUCUCCTT      | 896 |
| TNF   | 568  | CUCCUACCAGACCAAGGUCAACC   | 184 | sense     | 31410 | TNFa:178U21 siRNA                    | CCUACCAGACCAAGGUCAATT      | 897 |
| TNF   | 1150 | UUAGGCCUUCCUCUCCAGAU      | 185 | sense     | 31411 | TNFa:570U21 siRNA                    | AGGCCUUCUCCUCUCCAGATT      | 898 |
| TNF   | 77   | AAGGACACCAUGAGCACUGAAAG   | 182 | antisense | 31412 | TNFa:1152U21 siRNA<br>(79C)          | UUCAGUGCCUCAUGGUGUCCTT     | 899 |

|     |      |                         |     |           |       |                               |                        |     |
|-----|------|-------------------------|-----|-----------|-------|-------------------------------|------------------------|-----|
| TNF | 176  | UUGUCCUCAGCCUCUCUCCUU   | 183 | antisense | 31413 | TNFa:196L21 siRNA<br>(178C)   | GGAGAAGAGGCUGAGGAACCTT | 900 |
| TNF | 568  | CUCCUACCAGACCAAGGUCAACC | 184 | antisense | 31414 | TNFa:588L21 siRNA<br>(570C)   | UUGACCUUGGUCUGGUAGGTT  | 901 |
| TNF | 1150 | UUAGGCCUCCUCUCCAGAUG    | 185 | antisense | 31415 | TNFa:1170L21 siRNA<br>(1152C) | UCUGGAGAGAGGAAGGCCUTT  | 902 |

Uppercase = ribonucleotide  
u,c = 2'-deoxy-2'-fluoro U,C  
T = thymidine  
B = inverted deoxy abasic  
s = phosphorothioate linkage  
A = deoxy Adenosine  
G = deoxy Guanosine

**Table II****A. 2.5  $\mu$ mol Synthesis Cycle ABI 394 Instrument**

| Reagent            | Equivalents | Amount      | Wait Time* DNA | Wait Time* 2'-O-methyl | Wait Time*RNA |
|--------------------|-------------|-------------|----------------|------------------------|---------------|
| Phosphoramidites   | 6.5         | 163 $\mu$ L | 45 sec         | 2.5 min                | 7.5 min       |
| S-Ethyl Tetrazole  | 23.8        | 238 $\mu$ L | 45 sec         | 2.5 min                | 7.5 min       |
| Acetic Anhydride   | 100         | 233 $\mu$ L | 5 sec          | 5 sec                  | 5 sec         |
| N-Methyl Imidazole | 186         | 233 $\mu$ L | 5 sec          | 5 sec                  | 5 sec         |
| TCA                | 176         | 2.3 mL      | 21 sec         | 21 sec                 | 21 sec        |
| Iodine             | 11.2        | 1.7 mL      | 45 sec         | 45 sec                 | 45 sec        |
| Beaucage           | 12.9        | 645 $\mu$ L | 100 sec        | 300 sec                | 300 sec       |
| Acetonitrile       | NA          | 6.67 mL     | NA             | NA                     | NA            |

**B. 0.2  $\mu$ mol Synthesis Cycle ABI 394 Instrument**

| Reagent            | Equivalents | Amount      | Wait Time* DNA | Wait Time* 2'-O-methyl | Wait Time*RNA |
|--------------------|-------------|-------------|----------------|------------------------|---------------|
| Phosphoramidites   | 15          | 31 $\mu$ L  | 45 sec         | 233 sec                | 465 sec       |
| S-Ethyl Tetrazole  | 38.7        | 31 $\mu$ L  | 45 sec         | 233 min                | 465 sec       |
| Acetic Anhydride   | 655         | 124 $\mu$ L | 5 sec          | 5 sec                  | 5 sec         |
| N-Methyl Imidazole | 1245        | 124 $\mu$ L | 5 sec          | 5 sec                  | 5 sec         |
| TCA                | 700         | 732 $\mu$ L | 10 sec         | 10 sec                 | 10 sec        |
| Iodine             | 20.6        | 244 $\mu$ L | 15 sec         | 15 sec                 | 15 sec        |
| Beaucage           | 7.7         | 232 $\mu$ L | 100 sec        | 300 sec                | 300 sec       |
| Acetonitrile       | NA          | 2.64 mL     | NA             | NA                     | NA            |

**C. 0.2  $\mu$ mol Synthesis Cycle 96 well Instrument**

| Reagent            | Equivalents:DNA/<br>2'-O-methyl/Ribo | Amount: DNA/2'-O-<br>methyl/Ribo | Wait Time* DNA | Wait Time* 2'-O-<br>methyl | Wait Time* Ribo |
|--------------------|--------------------------------------|----------------------------------|----------------|----------------------------|-----------------|
| Phosphoramidites   | 22/33/66                             | 40/60/120 $\mu$ L                | 60 sec         | 180 sec                    | 360sec          |
| S-Ethyl Tetrazole  | 70/105/210                           | 40/60/120 $\mu$ L                | 60 sec         | 180 min                    | 360 sec         |
| Acetic Anhydride   | 265/265/265                          | 50/50/50 $\mu$ L                 | 10 sec         | 10 sec                     | 10 sec          |
| N-Methyl Imidazole | 502/502/502                          | 50/50/50 $\mu$ L                 | 10 sec         | 10 sec                     | 10 sec          |
| TCA                | 238/475/475                          | 250/500/500 $\mu$ L              | 15 sec         | 15 sec                     | 15 sec          |
| Iodine             | 6.8/6.8/6.8                          | 80/80/80 $\mu$ L                 | 30 sec         | 30 sec                     | 30 sec          |
| Beaucage           | 34/51/51                             | 80/120/120                       | 100 sec        | 200 sec                    | 200 sec         |
| Acetonitrile       | NA                                   | 1150/1150/1150 $\mu$ L           | NA             | NA                         | NA              |

- Wait time does not include contact time during delivery.
- Tandem synthesis utilizes double coupling of linker molecule

Table III

| Group | Solution on Filter (1.0 $\mu$ L)         | Stock VEGF concentration | Number of Animals | Injectate (6.0 $\mu$ L)        | Dose           | Conc. injectate        |
|-------|--|--------------------------|-------------------|--------------------------------|----------------|------------------------|
| 1     | Tris-Cl pH 6.9                           | NA                       | 5                 | water                          | NA             | NA                     |
| 2     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | water                          | NA             | NA                     |
| 3     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Site 2340 Stab1 siRNA          | 10 $\mu$ g/eye | 1.67 $\mu$ g/ $\mu$ L  |
| 4     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Site 2340 Stab1 siRNA          | 3 $\mu$ g/eye  | 0.5 $\mu$ g/ $\mu$ L   |
| 5     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Site 2340 Stab1 siRNA          | 1 $\mu$ g/eye  | 0.167 $\mu$ g/ $\mu$ L |
| 6     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Inactive Site 2340 Stab1 siRNA | 10 $\mu$ g/eye | 1.67 $\mu$ g/ $\mu$ L  |
| 7     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Inactive Site 2340 Stab1 siRNA | 3 $\mu$ g/eye  | 0.5 $\mu$ g/ $\mu$ L   |
| 8     | R&D Systems VEGF-carrier free 75 $\mu$ M | 3.53 $\mu$ g/ $\mu$ L    | 5                 | Inactive Site 2340 Stab1 siRNA | 1 $\mu$ g/eye  | 0.167 $\mu$ g/ $\mu$ L |

**Table IV**

Non-limiting examples of Stabilization Chemistries for chemically modified siNA constructs

| Chemistry | pyrimidine  | Purine      | cap            | p=S                        | Strand     |
|-----------|-------------|-------------|----------------|----------------------------|------------|
| "Stab 1"  | Ribo        | Ribo        | -              | 5 at 5'-end<br>1 at 3'-end | S/AS       |
| "Stab 2"  | Ribo        | Ribo        | -              | All linkages               | Usually AS |
| "Stab 3"  | 2'-fluoro   | Ribo        | -              | 4 at 5'-end<br>4 at 3'-end | Usually S  |
| "Stab 4"  | 2'-fluoro   | Ribo        | 5' and 3'-ends | -                          | Usually S  |
| "Stab 5"  | 2'-fluoro   | Ribo        | -              | 1 at 3'-end                | Usually AS |
| "Stab 6"  | 2'-O-Methyl | Ribo        | 5' and 3'-ends | -                          | Usually S  |
| "Stab 7"  | 2'-fluoro   | 2'-deoxy    | 5' and 3'-ends | -                          | Usually S  |
| "Stab 8"  | 2'-fluoro   | 2'-O-Methyl | -              | 1 at 3'-end                | Usually AS |
| "Stab 9"  | Ribo        | Ribo        | 5' and 3'-ends | -                          | Usually S  |
| "Stab 10" | Ribo        | Ribo        | -              | 1 at 3'-end                | Usually AS |
| "Stab 11" | 2'-fluoro   | 2'-deoxy    | -              | 1 at 3'-end                | Usually AS |

5 CAP = any terminal cap, see for example Figure 10.

All Stab 1-11 chemistries can comprise 3'-terminal thymidine (TT) residues

All Stab 1-11 chemistries typically comprise 21 nucleotides, but can vary as described herein.

S = sense strand

10 AS = antisense strand

**Table V**

| <b>Acc#</b> | <b>Description</b>   |
|-------------|--|
| NM_002825   | Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN), mRNA           |
| NM_033418   | Homo sapiens hypothetical protein MGC9084 (MGC9084), mRNA  |
| NM_033111   | Homo sapiens LOC88523 (LOC88523), mRNA   |
| NM_032564   | Homo sapiens diacylglycerol O-acyltransferase homolog 2 (mouse) (DGAT2), mRNA  |
| NM_032311   | Homo sapiens KIAA1649 protein (KIAA1649), mRNA   |
| NM_022130   | Homo sapiens golgi phosphoprotein 3 (coat-protein) (GOLPH3), mRNA  |
| NM_021980   | Homo sapiens optineurin (OPTN), mRNA   |
| NM_000660   | Homo sapiens transforming growth factor, beta 1 (Camurati-Engelmann disease) (TGFB1), mRNA                           |
| NM_020423   | Homo sapiens hypothetical protein LOC57147 (LOC57147), mRNA  |
| NM_020351   | Homo sapiens smooth muscle cell-expressed and macrophage conditioned medium-induced protein smag-64 (LOC57086), mRNA |
| NM_019556   | Homo sapiens hypothetical protein dJ473B4 (DJ473B4), mRNA  |
| NM_018676   | Homo sapiens TMTSP for transmembrane molecule with thrombospondin module (LOC55901), mRNA                            |
| NM_016265   | Homo sapiens GIOT-3 for gonadotropin inducible transcription repressor-3 (GIOT-3), mRNA                              |
| NM_016531   | Homo sapiens Kruppel-like factor 3 (basic) (KLF3), mRNA  |
| NM_016372   | Homo sapiens seven transmembrane domain orphan receptor (TPRA40), mRNA   |
| NM_016211   | Homo sapiens yeast Sec31p homolog (KIAA0905), mRNA   |
| NM_014933   | Homo sapiens yeast Sec31p homolog (KIAA0905), mRNA   |
| NM_014706   | Homo sapiens squamous cell carcinoma antigen recognised by T cells 3 (SART3), mRNA                                   |
| NM_014463   | Homo sapiens Lsm3 protein (LSM3), mRNA   |
| NM_014288   | Homo sapiens integrin beta 3 binding protein (beta3-endonexin) (ITGB3BP), mRNA                                       |
| NM_013443   | Homo sapiens CMP-NeuAC:(beta)-N-acetylgalactosaminide (alpha)2,6-sialyltransferase member VI (VI), mRNA              |
| NM_012404   | Homo sapiens pp32 related 2 (PP32R2), mRNA   |
| NM_012403   | Homo sapiens pp32 related 1 (PP32R1), mRNA   |
| NM_006710   | Homo sapiens COP9 homolog (COP9), mRNA   |
| NM_006117   | Homo sapiens peroxisomal D3,D2-enoyl-CoA isomerase (PECI), mRNA  |
| NM_005839   | Homo sapiens serine/arginine repetitive matrix 1 (SRRM1), mRNA   |
| NM_004264   | Homo sapiens SRB7 suppressor of RNA polymerase B homolog (yeast) (SURB7), mRNA                                       |
| NM_003714   | Homo sapiens stanniocalcin 2 (STC2), mRNA  |
| NM_003122   | Homo sapiens serine protease inhibitor, Kazal type 1 (SPINK1), mRNA  |
| NM_003690   | Homo sapiens protein kinase, interferon-inducible double stranded RNA dependent activator (PRKRA), mRNA              |
| NM_015526   | Homo sapiens CLIP-170-related protein (CLIPR-59), mRNA   |
| NM_033401   | Homo sapiens cell recognition protein CASPR4 (CASPR4), mRNA  |
| NM_023037   | Homo sapiens hypothetical protein CG003 (13CDNA73), mRNA   |
| NM_021817   | Homo sapiens brain link protein-1 (BRAL1), mRNA  |
| NM_016222   | Homo sapiens DEAD-box protein abstract (ABS), mRNA   |
| NM_003744   | Homo sapiens numb homolog (Drosophila) (NUMB), mRNA  |
| NM_032682   | Homo sapiens forkhead box P1 (FOXP1), mRNA   |
| NM_003681   | Homo sapiens pyridoxal (pyridoxine, vitamin B6) kinase (PDXK), mRNA  |

|           |   |
|-----------|---|
| NM_001685 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit F6 (ATP5J), mRNA          |
| NM_017954 | Homo sapiens hypothetical protein FLJ20761 (FLJ20761), mRNA   |
| NM_015626 | Homo sapiens SOCS box-containing WD protein SWiP-1 (WSB1), mRNA   |
| NM_130795 | Homo sapiens regulator of G-protein signalling 3 (RGS3), mRNA   |
| NM_030877 | Homo sapiens chromosome 20 open reading frame 33 (C20orf33), mRNA   |
| NM_080830 | Homo sapiens cystatin 11 (CST11), mRNA  |
| NM_032329 | Homo sapiens p28 ING5 (ING5), mRNA  |
| NM_022917 | Homo sapiens nucleolar RNA-associated protein (Nrap), mRNA  |
| NM_130787 | Homo sapiens adaptor-related protein complex 2, alpha 1 subunit (AP2A1), mRNA                                       |
| NM_024744 | Homo sapiens (ALS2CR8), mRNA  |
| NM_018984 | Homo sapiens slingshot 1 (hSSH-1), mRNA   |
| NM_106552 | Homo sapiens hypothetical protein FLJ14249 similar to HS1 binding protein 3 (FLJ14249), transcript variant 2, mRNA  |
| NM_022460 | Homo sapiens hypothetical protein FLJ14249 similar to HS1 binding protein 3 (FLJ14249), transcript variant 1, mRNA  |
| NM_130446 | Homo sapiens kelch-like protein KLHL6 (KLHL6), mRNA   |
| NM_020314 | Homo sapiens esophageal cancer associated protein (MGC16824), mRNA  |
| NM_130395 | Homo sapiens Werner helicase interacting protein (WHIP), transcript variant 2, mRNA                                 |
| NM_020135 | Homo sapiens Werner helicase interacting protein (WHIP), transcript variant 1, mRNA                                 |
| NM_130388 | Homo sapiens ankyrin repeat and SOCS box-containing 12 (ASB12), mRNA  |
| NM_130387 | Homo sapiens ankyrin repeat and SOCS box-containing 14 (ASB14), mRNA  |
| NM_007191 | Homo sapiens WNT inhibitory factor 1 (WIF1), mRNA   |
| NM_052950 | Homo sapiens WD40- and FYVE-domain containing protein 2 (WDF2), mRNA  |
| NM_025042 | Homo sapiens Williams-Beuren syndrome chromosome region 23 (WBSCR23), mRNA  |
| NM_080706 | Homo sapiens transient receptor potential cation channel, subfamily V, member 1 (TRPV1), transcript variant 3, mRNA |
| NM_080705 | Homo sapiens transient receptor potential cation channel, subfamily V, member 1 (TRPV1), transcript variant 4, mRNA |
| NM_080704 | Homo sapiens transient receptor potential cation channel, subfamily V, member 1 (TRPV1), transcript variant 1, mRNA |
| NM_018727 | Homo sapiens transient receptor potential cation channel, subfamily V, member 1 (TRPV1), transcript variant 2, mRNA |
| NM_080879 | Homo sapiens SOCS box containing protein RAR2A (RAR2A), mRNA  |
| NM_080871 | Homo sapiens ankyrin repeat and SOCS box-containing 10 (ASB10), mRNA  |
| NM_080870 | Homo sapiens DPCR1 protein (DPCR1), mRNA  |
| NM_080834 | Homo sapiens chromosome 20 open reading frame 152 (C20orf152), mRNA   |
| NM_080829 | Homo sapiens chromosome 20 open reading frame 175 (C20orf175), mRNA   |
| NM_080828 | Homo sapiens chromosome 20 open reading frame 173 (C20orf173), mRNA   |
| NM_080819 | Homo sapiens G protein-coupled receptor 78 (GPR78), mRNA  |
| NM_080752 | Homo sapiens chromosome 20 open reading frame 164 (C20orf164), mRNA   |
| NM_080749 | Homo sapiens chromosome 20 open reading frame 163 (C20orf163), mRNA   |
| NM_080745 | Homo sapiens ring finger protein 36 (RNF36), mRNA   |
| NM_080738 | Homo sapiens EDAR-associated death domain (EDARADD), mRNA   |
| NM_014970 | Homo sapiens kinesin-associated protein 3 (KIFAP3), mRNA  |
| NM_021058 | Homo sapiens H2B histone family, member R (H2BFR), mRNA   |
| NM_021064 | Homo sapiens H2A histone family, member P (H2AFP), mRNA   |
| NM_080491 | Homo sapiens GRB2-associated binding protein 2 (GAB2), transcript variant 1, mRNA                                   |



|           |  |
|-----------|--|
|           | mRNA   |
| NM_012296 | Homo sapiens GRB2-associated binding protein 2 (GAB2), transcript variant 2, mRNA  |
| NM_007247 | Homo sapiens API gamma subunit binding protein 1 (APIGBP1), transcript variant 1, mRNA   |
| NM_080551 | Homo sapiens API gamma subunit binding protein 1 (APIGBP1), transcript variant 3, mRNA   |
| NM_080550 | Homo sapiens API gamma subunit binding protein 1 (APIGBP1), transcript variant 2, mRNA   |
| NM_000982 | Homo sapiens ribosomal protein L21 (RPL21), mRNA   |
| NM_003913 | Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4), mRNA   |
| NM_002475 | Homo sapiens myosin light chain 1 slow a (MLC1SA), mRNA  |
| NM_002729 | Homo sapiens hematopoietically expressed homeobox (HHEX), mRNA   |
| NM_005893 | Homo sapiens calicin (CCIN), mRNA  |
| NM_017593 | Homo sapiens homolog of mouse BMP-2 inducible kinase (BIKE), mRNA  |
| NM_032027 | Homo sapiens beta-amyloid binding protein precursor (BBP), mRNA  |
| NM_004051 | Homo sapiens 3-hydroxybutyrate dehydrogenase (heart, mitochondrial) (BDH), nuclear gene encoding mitochondrial protein, mRNA     |
| NM_006576 | Homo sapiens advillin (AVIL), mRNA   |
| NM_013375 | Homo sapiens TATA-binding protein-binding protein (ABT1), mRNA   |
| NM_058219 | Homo sapiens homolog of yeast mRNA transport regulator 3 (MTR3), mRNA  |
| NM_058237 | Homo sapiens HEAT-like repeat-containing protein (KIAA1622), transcript variant 1, mRNA  |
| NM_020958 | Homo sapiens HEAT-like repeat-containing protein (KIAA1622), transcript variant 2, mRNA  |
| NM_004702 | Homo sapiens cyclin E2 (CCNE2), transcript variant 3, mRNA   |
| NM_057749 | Homo sapiens cyclin E2 (CCNE2), transcript variant 1, mRNA   |
| NM_057735 | Homo sapiens cyclin E2 (CCNE2), transcript variant 2, mRNA   |
| NM_002013 | Homo sapiens FK506 binding protein 3 (25kD) (FKBP3), mRNA  |
| NM_004724 | Homo sapiens ZW10 homolog, centromere/kinetochore protein (Drosophila) (ZW10), mRNA  |
| NM_057159 | Homo sapiens endothelial differentiation, lysophosphatidic acid G-protein-coupled receptor, 2 (EDG2), transcript variant 2, mRNA |
| NM_001401 | Homo sapiens endothelial differentiation, lysophosphatidic acid G-protein-coupled receptor, 2 (EDG2), transcript variant 1, mRNA |
| NM_015084 | Homo sapiens mitochondrial ribosomal protein S27 (MRPS27), nuclear gene encoding mitochondrial protein, mRNA                     |
| NM_033281 | Homo sapiens mitochondrial ribosomal protein S36 (MRPS36), nuclear gene encoding mitochondrial protein, mRNA                     |
| NM_005830 | Homo sapiens mitochondrial ribosomal protein S31 (MRPS31), nuclear gene encoding mitochondrial protein, mRNA                     |
| NM_012062 | Homo sapiens dynamin 1-like (DNM1L), transcript variant 1, mRNA  |
| NM_005648 | Homo sapiens transcription elongation factor B (SIII), polypeptide 1 (15kD, elongin C) (TCEB1), mRNA                             |
| NM_007070 | Homo sapiens FKBP-associated protein (FAP48), transcript variant 2, mRNA   |
| NM_053274 | Homo sapiens FKBP-associated protein (FAP48), transcript variant 1, mRNA   |
| NM_054113 | Homo sapiens DNA-dependent protein kinase catalytic subunit-interacting protein 3 (KIP3), mRNA                                   |
| NM_003726 | Homo sapiens src family associated phosphoprotein 1 (SCAP1), mRNA  |
| NM_012308 | Homo sapiens F-box and leucine-rich repeat protein 11 (FBXL11), mRNA   |
| NM_030913 | Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C (SEMA6C), mRNA                      |

|           |  |
|-----------|--|
| NM_021163 | Homo sapiens RB-associated KRAB repressor (RBAK), mRNA   |
| NM_033632 | Homo sapiens F-box and WD-40 domain protein 7 (archipelago homolog, Drosophila) (FBXW7), transcript variant 1, mRNA            |
| NM_018315 | Homo sapiens F-box and WD-40 domain protein 7 (archipelago homolog, Drosophila) (FBXW7), transcript variant 2, mRNA            |
| NM_012168 | Homo sapiens F-box only protein 2 (FBXO2), mRNA  |
| NM_033332 | Homo sapiens CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 3, mRNA                       |
| NM_033331 | Homo sapiens CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 2, mRNA                       |
| NM_003671 | Homo sapiens CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 1, mRNA                       |
| NM_033307 | Homo sapiens caspase 4, apoptosis-related cysteine protease (CASP4), transcript variant delta, mRNA                            |
| NM_033306 | Homo sapiens caspase 4, apoptosis-related cysteine protease (CASP4), transcript variant gamma, mRNA                            |
| NM_001225 | Homo sapiens caspase 4, apoptosis-related cysteine protease (CASP4), transcript variant alpha, mRNA                            |
| NM_002948 | Homo sapiens ribosomal protein L15 (RPL15), mRNA   |
| NM_033228 | Homo sapiens ADP-ribosylation factor domain protein 1, 64kD (ARFD1), transcript variant gamma, mRNA                            |
| NM_033227 | Homo sapiens ADP-ribosylation factor domain protein 1, 64kD (ARFD1), transcript variant beta, mRNA                             |
| NM_001656 | Homo sapiens ADP-ribosylation factor domain protein 1, 64kD (ARFD1), transcript variant alpha, mRNA                            |
| NM_021203 | Homo sapiens APMCF1 protein (APMCF1), mRNA   |
| NM_012095 | Homo sapiens adaptor-related protein complex 3, mu 1 subunit (AP3M1), mRNA   |
| NM_001025 | Homo sapiens ribosomal protein S23 (RPS23), mRNA   |
| NM_032989 | Homo sapiens BCL2-antagonist of cell death (BAD), transcript variant 2, mRNA   |
| NM_004322 | Homo sapiens BCL2-antagonist of cell death (BAD), transcript variant 1, mRNA   |
| NM_014326 | Homo sapiens death-associated protein kinase 2 (DAPK2), mRNA   |
| NM_012430 | Homo sapiens sec22 homolog (SEC22A), mRNA  |
| NM_031216 | Homo sapiens sec13-like protein (SEC13L), mRNA   |
| NM_002927 | Homo sapiens regulator of G-protein signalling 13 (RGS13), mRNA  |
| NM_031274 | Homo sapiens testis expressed sequence 13A (TEX13A), mRNA  |
| NM_001730 | Homo sapiens Kruppel-like factor 5 (intestinal) (KLF5), mRNA   |
| NM_032674 | Homo sapiens leucine rich repeat (in FLII) interacting protein 1 (LRRFIP1), mRNA   |
| NM_031361 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) binding protein (COL4A3BP), transcript variant 2, mRNA           |
| NM_031266 | Homo sapiens heterogeneous nuclear ribonucleoprotein A/B (HNRPAB), transcript variant 1, mRNA                                  |
| NM_004499 | Homo sapiens heterogeneous nuclear ribonucleoprotein A/B (HNRPAB), transcript variant 2, mRNA                                  |
| NM_004990 | Homo sapiens methionine-tRNA synthetase (MARS), mRNA   |
| NM_031244 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 5 (S. cerevisiae) (SIRT5), transcript variant 2, mRNA |
| NM_012241 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 5 (S. cerevisiae) (SIRT5), transcript variant 1, mRNA |
| NM_006845 | Homo sapiens kinesin-like 6 (mitotic centromere-associated kinesin) (KNSL6), mRNA  |

|           |   |
|-----------|---|
| NM_030920 | Homo sapiens leucine-rich acidic protein-like protein (LANP-L), mRNA  |
| NM_016228 | Homo sapiens L-kynurenine/alpha-aminoadipate aminotransferase (KATII), mRNA                                     |
| NM_017951 | Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA   |
| NM_000778 | Homo sapiens cytochrome P450, subfamily IVA, polypeptide 11 (CYP4A11), mRNA                                     |
| NM_006582 | Homo sapiens glucocorticoid modulatory element binding protein 1 (GMEB1), transcript variant 1, mRNA            |
| NM_024482 | Homo sapiens glucocorticoid modulatory element binding protein 1 (GMEB1), transcript variant 2, mRNA            |
| NM_024885 | Homo sapiens TAF7-like RNA polymerase II, TATA box binding protein (TBP)-associated factor, 50 kD (TAF7L), mRNA |
| NM_005736 | Homo sapiens ARP1 actin-related protein 1 homolog A, centractin alpha (yeast) (ACTR1A), mRNA                    |
| NM_014031 | Homo sapiens VLCS-H1 protein (VLCS-H1), mRNA  |
| NM_022334 | Homo sapiens integrin cytoplasmic domain-associated protein 1 (ICAP-1A), transcript variant 2, mRNA             |
| NM_007036 | Homo sapiens endothelial cell-specific molecule 1 (ESM1), mRNA  |
| NM_006817 | Homo sapiens chromosome 12 open reading frame 8 (C12orf8), mRNA   |
| NM_022802 | Homo sapiens C-terminal binding protein 2 (CTBP2), transcript variant 2, mRNA                                   |
| NM_001951 | Homo sapiens E2F transcription factor 5, p130-binding (E2F5), mRNA  |
| NM_022142 | Homo sapiens epididymal sperm binding protein 1 (ELSPBP1), mRNA   |
| NM_012200 | Homo sapiens beta-1,3-glucuronyltransferase 3 (glucuronosyltransferase I) (B3GAT3), mRNA                        |
| NM_022375 | Homo sapiens oculomedin (OCLM), mRNA  |
| NM_004962 | Homo sapiens growth differentiation factor 10 (GDF10), mRNA   |
| NM_007372 | Homo sapiens RNA helicase-related protein (RNAHP), mRNA   |
| NM_005613 | Homo sapiens regulator of G-protein signalling 4 (RGS4), mRNA   |
| NM_006083 | Homo sapiens IK cytokine, down-regulator of HLA II (IK), mRNA   |
| NM_012426 | Homo sapiens splicing factor 3b, subunit 3, 130kD (SF3B3), mRNA   |
| NM_018164 | Homo sapiens hypothetical protein FLJ10637 (FLJ10637), mRNA   |
| NM_006367 | Homo sapiens adenyl cyclase-associated protein (CAP), mRNA  |
| NM_021106 | Homo sapiens regulator of G-protein signalling 3 (RGS3), mRNA   |
| NM_021082 | Homo sapiens solute carrier family 15 (H+/peptide transporter), member 2 (SLC15A2), mRNA                        |
| NM_016578 | Homo sapiens HBV pX associated protein-8 (LOC51773), mRNA   |
| NM_006671 | Homo sapiens solute carrier family 1 (glutamate transporter), member 7 (SLC1A7), mRNA                           |
| NM_020650 | Homo sapiens hypothetical protein LOC57333 (LOC57333), mRNA   |
| NM_015990 | Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA  |
| NM_020905 | Homo sapiens PAN2 protein (PAN2), mRNA  |
| NM_020685 | Homo sapiens HT021 (HT021), mRNA  |
| NM_020682 | Homo sapiens Cyt19 protein (Cyt19), mRNA  |
| NM_020678 | Homo sapiens HT017 protein (HT017), mRNA  |
| NM_020669 | Homo sapiens uncharacterized gastric protein ZA52P (LOC57399), mRNA   |
| NM_003760 | Homo sapiens eukaryotic translation initiation factor 4 gamma, 3 (EIF4G3), mRNA                                 |
| NM_020412 | Homo sapiens CHMP1.5 protein (CHMP1.5), mRNA  |
| NM_020411 | Homo sapiens XAGE-1 protein (XAGE-1), mRNA  |
| NM_020408 | Homo sapiens CGI-203 protein (CGI-203), mRNA  |
| NM_020395 | Homo sapiens hypothetical nuclear factor SBBI22 (LOC57117), mRNA  |

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| NM_020387 | Homo sapiens CATX-8 protein (CATX-8), mRNA  |
| NM_020371 | Homo sapiens cell death regulator aven (LOC57099), mRNA   |
| NM_020362 | Homo sapiens HT014 (HT014), mRNA  |
| NM_020307 | Homo sapiens cyclin L ania-6a (LOC57018), mRNA  |
| NM_007187 | Homo sapiens WW domain binding protein 4 (formin binding protein 21) (WBP4), mRNA                           |
| NM_005644 | Homo sapiens TAF12 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 20 kD (TAF12), mRNA |
| NM_020150 | Homo sapiens SAR1 protein (SAR1), mRNA  |
| NM_020167 | Homo sapiens neuromedin U receptor 2 (NMU2R), mRNA  |
| NM_020233 | Homo sapiens x 006 protein (MDS006), mRNA   |
| NM_020232 | Homo sapiens x 003 protein (MDS003), mRNA   |
| NM_020247 | Homo sapiens hypothetical protein, clone Telethon(Italy_B41)_Strait02270_FL142 (LOC56997), mRNA             |
| NM_020213 | Homo sapiens hypothetical protein from EUROIMAGE 1977056 (LOC56965), mRNA                                   |
| NM_020153 | Homo sapiens hypothetical protein (LOC56912), mRNA  |
| NM_020149 | Homo sapiens Meis1, myeloid ecotropic viral integration site 1 homolog 2 (mouse) (MEIS2), mRNA              |
| NM_020120 | Homo sapiens UDP-glucose ceramide glucosyltransferase-like 1 (UGCGLI), mRNA                                 |
| NM_020190 | Homo sapiens HNOEL-iso protein (HNOEL-iso), mRNA  |
| NM_020242 | Homo sapiens kinesin-like 7 (KNSL7), mRNA   |
| NM_020194 | Homo sapiens GL004 protein (GL004), mRNA  |
| NM_020193 | Homo sapiens GL002 protein (GL002), mRNA  |
| NM_020189 | Homo sapiens DC6 protein (DC6), mRNA  |
| NM_020188 | Homo sapiens DC13 protein (DC13), mRNA  |
| NM_020134 | Homo sapiens collapsin response mediator protein-5; CRMP3-associated molecule (CRMP5), mRNA                 |
| NM_019893 | Homo sapiens mitochondrial ceramidase (ASAH2), mRNA   |
| NM_019846 | Homo sapiens CC chemokine CCL28 (SCYA28), mRNA  |
| NM_019852 | Homo sapiens putative methyltransferase (M6A), mRNA   |
| NM_013338 | Homo sapiens Alg5, S. cerevisiae, homolog of (ALG5), mRNA   |
| NM_013341 | Homo sapiens hypothetical protein (PTD004), mRNA  |
| NM_013318 | Homo sapiens hypothetical protein (LQFBS-1), mRNA   |
| NM_013302 | Homo sapiens elongation factor-2 kinase (HSU93850), mRNA  |
| NM_013299 | Homo sapiens protein predicted by clone 23627 (HSU79266), mRNA  |
| NM_013347 | Homo sapiens replication protein A complex 34 kd subunit homolog Rpa4 (HSU24186), mRNA                      |
| NM_019011 | Homo sapiens TRIAD3 protein (TRIAD3), mRNA  |
| NM_018965 | Homo sapiens triggering receptor expressed on myeloid cells 2 (TREM2), mRNA                                 |
| NM_019043 | Homo sapiens similar to proline-rich protein 48 (LOC54518), mRNA  |
| NM_019006 | Homo sapiens protein associated with PRK1 (AWP1), mRNA  |
| NM_019101 | Homo sapiens apolipoprotein M (G3A), mRNA   |
| NM_019049 | Homo sapiens hypothetical protein (FLJ20054), mRNA  |
| NM_018992 | Homo sapiens hypothetical protein (FLJ20040), mRNA  |
| NM_019033 | Homo sapiens hypothetical protein (FLJ11235), mRNA  |
| NM_019045 | Homo sapiens similar to rab11-binding protein (FLJ11116), mRNA  |
| NM_019079 | Homo sapiens hypothetical protein (FLJ10884), mRNA  |
| NM_019073 | Homo sapiens hypothetical protein (FLJ10007), mRNA  |
| NM_014298 | Homo sapiens quinolinate phosphoribosyltransferase (nicotinate-nucleotide                                   |

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|           | pyrophosphorylase (carboxylating)) (QPRT), mRNA  |
| NM_012413 | Homo sapiens glutaminyl-peptide cyclotransferase (glutaminyl cyclase) (QPCT), mRNA                   |
| NM_018836 | Homo sapiens hypothetical protein (MOT8), mRNA   |
| NM_018643 | Homo sapiens triggering receptor expressed on myeloid cells 1 (TREM1), mRNA                          |
| NM_018647 | Homo sapiens tumor necrosis factor receptor superfamily, member 19 (TNFRSF19), mRNA                  |
| NM_018664 | Homo sapiens Jun dimerization protein p21SNFT (SNFT), mRNA   |
| NM_018540 | Homo sapiens hypothetical protein PRO2831 (PRO2831), mRNA  |
| NM_018630 | Homo sapiens hypothetical protein PRO2577 (PRO2577), mRNA  |
| NM_018527 | Homo sapiens hypothetical protein PRO2435 (PRO2435), mRNA  |
| NM_018625 | Homo sapiens hypothetical protein PRO2289 (PRO2289), mRNA  |
| NM_018515 | Homo sapiens hypothetical protein PRO2176 (PRO2176), mRNA  |
| NM_018615 | Homo sapiens hypothetical protein PRO2032 (PRO2032), mRNA  |
| NM_018614 | Homo sapiens hypothetical protein PRO2012 (PRO2012), mRNA  |
| NM_018608 | Homo sapiens hypothetical protein PRO1905 (PRO1905), mRNA  |
| NM_018509 | Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA  |
| NM_018505 | Homo sapiens hypothetical protein PRO1728 (PRO1728), mRNA  |
| NM_018444 | Homo sapiens pyruvate dehydrogenase phosphatase (PDP), mRNA  |
| NM_018442 | Homo sapiens PC326 protein (PC326), mRNA   |
| NM_018698 | Homo sapiens hypothetical protein P15-2 (P15-2), mRNA  |
| NM_018466 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS031 (MDS031), mRNA       |
| NM_018465 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS030 (MDS030), mRNA       |
| NM_018463 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS028 (MDS028), mRNA       |
| NM_018650 | Homo sapiens MAP/microtubule affinity-regulating kinase 1 (MARK1), mRNA                              |
| NM_018678 | Homo sapiens lipopolysaccharide specific response-68 protein (LSR68), mRNA                           |
| NM_018695 | Homo sapiens erbb2 interacting protein (ERBB2IP), mRNA   |
| NM_018683 | Homo sapiens zinc finger protein 313 (ZNF313), mRNA  |
| NM_018660 | Homo sapiens papillomavirus regulatory factor PRF-1 (LOC55893), mRNA                                 |
| NM_018484 | Homo sapiens solute carrier family 22 (organic anion/cation transporter), member 11 (SLC22A11), mRNA |
| NM_018445 | Homo sapiens AD-015 protein (LOC55829), mRNA   |
| NM_017571 | Homo sapiens hypothetical protein (LOC55580), mRNA   |
| NM_017542 | Homo sapiens KIAA1513 protein (KIAA1513), mRNA   |
| NM_018473 | Homo sapiens uncharacterized hypothalamus protein HT012 (HT012), mRNA                                |
| NM_018480 | Homo sapiens uncharacterized hypothalamus protein HT007 (HT007), mRNA                                |
| NM_017583 | Homo sapiens DIPB protein (HSA249128), mRNA  |
| NM_017567 | Homo sapiens N-acetylglucosamine kinase (NAGK), mRNA   |
| NM_018487 | Homo sapiens hepatocellular carcinoma-associated antigen 112 (HCA112), mRNA                          |
| NM_017548 | Homo sapiens hypothetical protein (H41), mRNA  |
| NM_017547 | Homo sapiens hypothetical protein (H17), mRNA  |
| NM_017966 | Homo sapiens hypothetical protein FLJ20847 (FLJ20847), mRNA  |
| NM_017955 | Homo sapiens hypothetical protein FLJ20764 (FLJ20764), mRNA  |
| NM_017948 | Homo sapiens hypothetical protein FLJ20736 (FLJ20736), mRNA  |
| NM_017945 | Homo sapiens hypothetical protein FLJ20730 (FLJ20730), mRNA  |
| NM_017944 | Homo sapiens hypothetical protein FLJ20727 (FLJ20727), mRNA  |
| NM_017939 | Homo sapiens hypothetical protein FLJ20718 (FLJ20718), mRNA  |

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| NM_017924 | Homo sapiens hypothetical protein FLJ20671 (FLJ20671), mRNA  |
| NM_017923 | Homo sapiens hypothetical protein FLJ20668 (FLJ20668), mRNA  |
| NM_017922 | Homo sapiens hypothetical protein FLJ20666 (FLJ20666), mRNA  |
| NM_017908 | Homo sapiens hypothetical protein FLJ20626 (FLJ20626), mRNA  |
| NM_017906 | Homo sapiens hypothetical protein FLJ20624 (FLJ20624), mRNA  |
| NM_017904 | Homo sapiens hypothetical protein FLJ20619 (FLJ20619), mRNA  |
| NM_017890 | Homo sapiens hypothetical protein FLJ20583 (FLJ20583), mRNA  |
| NM_017887 | Homo sapiens hypothetical protein FLJ20580 (FLJ20580), mRNA  |
| NM_017886 | Homo sapiens hypothetical protein FLJ20574 (FLJ20574), mRNA  |
| NM_017880 | Homo sapiens hypothetical protein FLJ20558 (FLJ20558), mRNA  |
| NM_017878 | Homo sapiens HRAS-like suppressor 2 (HRASLS2), mRNA  |
| NM_017877 | Homo sapiens hypothetical protein FLJ20555 (FLJ20555), mRNA  |
| NM_017875 | Homo sapiens hypothetical protein FLJ20551 (FLJ20551), mRNA  |
| NM_017870 | Homo sapiens hypothetical protein FLJ20539 (FLJ20539), mRNA  |
| NM_017867 | Homo sapiens hypothetical protein FLJ20534 (FLJ20534), mRNA  |
| NM_017864 | Homo sapiens hypothetical protein FLJ20530 (FLJ20530), mRNA  |
| NM_017857 | Homo sapiens slingshot 3 (SSH-3), mRNA   |
| NM_017852 | Homo sapiens NALP2 protein (NALP2), mRNA   |
| NM_017850 | Homo sapiens hypothetical protein FLJ20508 (FLJ20508), mRNA  |
| NM_017846 | Homo sapiens tRNA selenocysteine associated protein (SECP43), mRNA   |
| NM_017841 | Homo sapiens hypothetical protein FLJ20487 (FLJ20487), mRNA  |
| NM_017839 | Homo sapiens hypothetical protein FLJ20481 (FLJ20481), mRNA  |
| NM_017837 | Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA  |
| NM_017832 | Homo sapiens hypothetical protein FLJ20457 (FLJ20457), mRNA  |
| NM_017827 | Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA  |
| NM_017826 | Homo sapiens hypothetical protein FLJ20449 (FLJ20449), mRNA  |
| NM_017823 | Homo sapiens hypothetical protein FLJ20442 (FLJ20442), mRNA  |
| NM_017822 | Homo sapiens hypothetical protein FLJ20436 (FLJ20436), mRNA  |
| NM_017821 | Homo sapiens hypothetical protein FLJ20435 (FLJ20435), mRNA  |
| NM_017815 | Homo sapiens hypothetical protein FLJ20424 (FLJ20424), mRNA  |
| NM_017811 | Homo sapiens hypothetical protein FLJ20419 (FLJ20419), mRNA  |
| NM_017810 | Homo sapiens hypothetical protein FLJ20417 (FLJ20417), mRNA  |
| NM_017802 | Homo sapiens hypothetical protein FLJ20397 (FLJ20397), mRNA  |
| NM_017792 | Homo sapiens hypothetical protein FLJ20373 (FLJ20373), mRNA  |
| NM_017790 | Homo sapiens regulator of G-protein signalling 3 (RGS3), mRNA  |
| NM_017786 | Homo sapiens hypothetical protein FLJ20366 (FLJ20366), mRNA  |
| NM_017785 | Homo sapiens hypothetical protein FLJ20364 (FLJ20364), mRNA  |
| NM_017775 | Homo sapiens hypothetical protein FLJ20343 (FLJ20343), mRNA  |
| NM_017774 | Homo sapiens hypothetical protein FLJ20342 (FLJ20342), mRNA  |
| NM_017772 | Homo sapiens hypothetical protein FLJ20337 (FLJ20337), mRNA  |
| NM_017770 | Homo sapiens elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 2 (ELOVL2), mRNA |
| NM_017762 | Homo sapiens hypothetical protein FLJ20313 (FLJ20313), mRNA  |
| NM_017759 | Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA  |
| NM_017756 | Homo sapiens hypothetical protein FLJ20306 (FLJ20306), mRNA  |
| NM_017753 | Homo sapiens hypothetical protein FLJ20300 (FLJ20300), mRNA  |
| NM_017751 | Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA  |
| NM_017748 | Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA  |
| NM_017744 | Homo sapiens hypothetical protein FLJ20284 (FLJ20284), mRNA  |
| NM_017740 | Homo sapiens hypothetical protein FLJ20279 (FLJ20279), mRNA  |
| NM_017738 | Homo sapiens hypothetical protein FLJ20276 (FLJ20276), mRNA  |

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| NM_017736 | Homo sapiens hypothetical protein FLJ20274 (FLJ20274), mRNA  |
| NM_017735 | Homo sapiens hypothetical protein FLJ20272 (FLJ20272), mRNA  |
| NM_017719 | Homo sapiens hypothetical protein FLJ20224 (FLJ20224), mRNA  |
| NM_017718 | Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA  |
| NM_017716 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 12 4-domains, subfamily A, member 7 (MS4A12), mRNA |
| NM_017711 | Homo sapiens hypothetical protein FLJ20207 (FLJ20207), mRNA  |
| NM_017709 | Homo sapiens hypothetical protein FLJ20202 (FLJ20202), mRNA  |
| NM_017704 | Homo sapiens hypothetical protein FLJ20189 (FLJ20189), mRNA  |
| NM_017699 | Homo sapiens hypothetical protein FLJ20174 (FLJ20174), mRNA  |
| NM_017697 | Homo sapiens hypothetical protein FLJ20171 (FLJ20171), mRNA  |
| NM_017687 | Homo sapiens hypothetical protein FLJ20147 (FLJ20147), mRNA  |
| NM_017686 | Homo sapiens ganglioside induced differentiation associated protein 2 (GDAP2), mRNA                              |
| NM_017678 | Homo sapiens hypothetical protein FLJ20127 (FLJ20127), mRNA  |
| NM_017677 | Homo sapiens hypothetical protein FLJ20126 (FLJ20126), mRNA  |
| NM_017676 | Homo sapiens hypothetical protein FLJ20125 (FLJ20125), mRNA  |
| NM_017670 | Homo sapiens hypothetical protein FLJ20113 (FLJ20113), mRNA  |
| NM_017669 | Homo sapiens hypothetical protein FLJ20105 (FLJ20105), mRNA  |
| NM_017665 | Homo sapiens hypothetical protein FLJ20094 (FLJ20094), mRNA  |
| NM_017659 | Homo sapiens hypothetical protein FLJ20084 (FLJ20084), mRNA  |
| NM_017657 | Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA  |
| NM_017645 | Homo sapiens hypothetical protein FLJ20060 (FLJ20060), mRNA  |
| NM_017640 | Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA  |
| NM_017637 | Homo sapiens hypothetical protein FLJ20043 (FLJ20043), mRNA  |
| NM_017636 | Homo sapiens transient receptor potential cation channel, subfamily M, member 4 (TRPM4), mRNA                    |
| NM_017634 | Homo sapiens hypothetical protein FLJ20038 (FLJ20038), mRNA  |
| NM_017629 | Homo sapiens hypothetical protein FLJ20033 (FLJ20033), mRNA  |
| NM_017622 | Homo sapiens hypothetical protein FLJ20014 (FLJ20014), mRNA  |
| NM_017620 | Homo sapiens hypothetical protein FLJ20011 (FLJ20011), mRNA  |
| NM_018396 | Homo sapiens putative methyltransferase (METL), mRNA   |
| NM_018381 | Homo sapiens hypothetical protein FLJ11286 (FLJ11286), mRNA  |
| NM_018371 | Homo sapiens hypothetical protein FLJ11264 (FLJ11264), mRNA  |
| NM_018368 | Homo sapiens hypothetical protein FLJ11240 (FLJ11240), mRNA  |
| NM_018367 | Homo sapiens phytoceramidase, alkaline (PHCA), mRNA  |
| NM_018364 | Homo sapiens hypothetical protein FLJ11220 (FLJ11220), mRNA  |
| NM_018363 | Homo sapiens hypothetical protein FLJ11218 (FLJ11218), mRNA  |
| NM_018361 | Homo sapiens hypothetical protein FLJ11210 (FLJ11210), mRNA  |
| NM_018358 | Homo sapiens hypothetical protein FLJ11198 (FLJ11198), mRNA  |
| NM_018353 | Homo sapiens hypothetical protein FLJ11186 (FLJ11186), mRNA  |
| NM_018352 | Homo sapiens hypothetical protein FLJ11184 (FLJ11184), mRNA  |
| NM_018340 | Homo sapiens hypothetical protein FLJ11151 (FLJ11151), mRNA  |
| NM_018339 | Homo sapiens hypothetical protein FLJ11149 (FLJ11149), mRNA  |
| NM_018336 | Homo sapiens hypothetical protein FLJ11136 (FLJ11136), mRNA  |
| NM_018333 | Homo sapiens hypothetical protein FLJ20666 (FLJ20666), mRNA  |
| NM_018332 | Homo sapiens hypothetical protein FLJ11126 (FLJ11126), mRNA  |
| NM_018330 | Homo sapiens KIAA1598 protein (KIAA1598), mRNA   |
| NM_018322 | Homo sapiens hypothetical protein FLJ11101 (FLJ11101), mRNA  |
| NM_018318 | Homo sapiens hypothetical protein FLJ11088 (FLJ11088), mRNA  |
| NM_018310 | Homo sapiens BRF2, subunit of RNA polymerase III transcription initiation factor, BRF1-like (BRF2), mRNA         |

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| NM_018303 | Homo sapiens hypothetical protein FLJ11026 (FLJ11026), mRNA                               |
| NM_018298 | Homo sapiens hypothetical protein FLJ11006 (FLJ11006), mRNA                               |
| NM_018287 | Homo sapiens hypothetical protein FLJ10971 (FLJ10971), mRNA                               |
| NM_018286 | Homo sapiens hypothetical protein FLJ10970 (FLJ10970), mRNA                               |
| NM_018283 | Homo sapiens hypothetical protein FLJ10956 (FLJ10956), mRNA                               |
| NM_018281 | Homo sapiens hypothetical protein FLJ10948 (FLJ10948), mRNA                               |
| NM_018278 | Homo sapiens hypothetical protein FLJ10933 (FLJ10933), mRNA                               |
| NM_018276 | Homo sapiens slingshot 3 (SSH-3), mRNA  |
| NM_018273 | Homo sapiens hypothetical protein FLJ10922 (FLJ10922), mRNA                               |
| NM_018272 | Homo sapiens hypothetical protein FLJ10921 (FLJ10921), mRNA                               |
| NM_018268 | Homo sapiens hypothetical protein FLJ10904 (FLJ10904), mRNA                               |
| NM_018265 | Homo sapiens hypothetical protein FLJ10901 (FLJ10901), mRNA                               |
| NM_018254 | Homo sapiens hypothetical protein FLJ10876 (FLJ10876), mRNA                               |
| NM_018253 | Homo sapiens hypothetical protein FLJ10875 (FLJ10875), mRNA                               |
| NM_018252 | Homo sapiens hypothetical protein FLJ10874 (FLJ10874), mRNA                               |
| NM_018245 | Homo sapiens hypothetical protein FLJ10851 (FLJ10851), mRNA                               |
| NM_018241 | Homo sapiens hypothetical protein FLJ10846 (FLJ10846), mRNA                               |
| NM_018239 | Homo sapiens hypothetical protein FLJ10751 (FLJ10751), mRNA                               |
| NM_018230 | Homo sapiens nucleoporin 133kD (NUP133), mRNA   |
| NM_018223 | Homo sapiens checkpoint with forkhead and ring finger domains (CHFR), mRNA                |
| NM_018219 | Homo sapiens hypothetical protein FLJ10786 (FLJ10786), mRNA                               |
| NM_018217 | Homo sapiens chromosome 20 open reading frame 31 (C20orf31), mRNA                         |
| NM_018212 | Homo sapiens likely ortholog of mouse NPC derived proline rich protein 1 (FLJ10773), mRNA |
| NM_018211 | Homo sapiens hypothetical protein FLJ10770 (KIAA1579), mRNA                               |
| NM_018207 | Homo sapiens hypothetical protein FLJ10759 (FLJ10759), mRNA                               |
| NM_018205 | Homo sapiens hypothetical protein FLJ10751 (FLJ10751), mRNA                               |
| NM_018192 | Homo sapiens hypothetical protein FLJ10718 (FLJ10718), mRNA                               |
| NM_018188 | Homo sapiens hypothetical protein FLJ10709 (FLJ10709), mRNA                               |
| NM_018187 | Homo sapiens hypothetical protein FLJ10707 (FLJ10707), mRNA                               |
| NM_018186 | Homo sapiens hypothetical protein FLJ10706 (FLJ10706), mRNA                               |
| NM_018184 | Homo sapiens hypothetical protein FLJ10702 (FLJ10702), mRNA                               |
| NM_018179 | Homo sapiens hypothetical protein FLJ10688 (FLJ10688), mRNA                               |
| NM_018178 | Homo sapiens hypothetical protein FLJ10687 (FLJ10687), mRNA                               |
| NM_018169 | Homo sapiens hypothetical protein FLJ10652 (FLJ10652), mRNA                               |
| NM_018161 | Homo sapiens hypothetical protein FLJ10631 (FLJ10631), mRNA                               |
| NM_018159 | Homo sapiens hypothetical protein FLJ10628 (FLJ10628), mRNA                               |
| NM_018147 | Homo sapiens hypothetical protein FLJ10582 (FLJ10582), mRNA                               |
| NM_018142 | Homo sapiens hypothetical protein FLJ10569 (FLJ10569), mRNA                               |
| NM_018137 | Homo sapiens protein arginine N-methyltransferase 6 (PRMT6), mRNA                         |
| NM_018136 | Homo sapiens hypothetical protein FLJ10517 (FLJ10517), mRNA                               |
| NM_018133 | Homo sapiens hypothetical protein FLJ10546 (FLJ10546), mRNA                               |
| NM_018122 | Homo sapiens hypothetical protein FLJ10514 (FLJ10514), mRNA                               |
| NM_018120 | Homo sapiens hypothetical protein FLJ10511 (FLJ10511), mRNA                               |
| NM_018119 | Homo sapiens hypothetical protein FLJ10509 (FLJ10509), mRNA                               |
| NM_018116 | Homo sapiens misato (FLJ10504), mRNA  |
| NM_018112 | Homo sapiens hypothetical protein FLJ10493 (FLJ10493), mRNA                               |
| NM_018106 | Homo sapiens hypothetical protein FLJ10479 (FLJ10479), mRNA                               |
| NM_018101 | Homo sapiens hypothetical protein FLJ10468 (FLJ10468), mRNA                               |
| NM_018100 | Homo sapiens hypothetical protein FLJ10466 (FLJ10466), mRNA                               |
| NM_018099 | Homo sapiens hypothetical protein FLJ10462 (FLJ10462), mRNA                               |



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| NM_018097 | Homo sapiens hypothetical protein FLJ10460 (FLJ10460), mRNA                    |
| NM_018093 | Homo sapiens hypothetical protein FLJ10439 (FLJ10439), mRNA                    |
| NM_018092 | Homo sapiens hypothetical protein FLJ10430 (FLJ10430), mRNA                    |
| NM_018091 | Homo sapiens hypothetical protein FLJ10422 (FLJ10422), mRNA                    |
| NM_018090 | Homo sapiens hypothetical protein FLJ10420 (FLJ10420), mRNA                    |
| NM_018087 | Homo sapiens hypothetical protein FLJ10407 (FLJ10407), mRNA                    |
| NM_018086 | Homo sapiens fidgetin (FIGN), mRNA   |
| NM_018078 | Homo sapiens hypothetical protein FLJ10378 (FLJ10378), mRNA                    |
| NM_018076 | Homo sapiens hypothetical protein FLJ10376 (FLJ10376), mRNA                    |
| NM_018075 | Homo sapiens hypothetical protein FLJ10375 (FLJ10375), mRNA                    |
| NM_018072 | Homo sapiens hypothetical protein FLJ10359 (FLJ10359), mRNA                    |
| NM_018070 | Homo sapiens hypothetical protein FLJ10355 (FLJ10355), mRNA                    |
| NM_018060 | Homo sapiens hypothetical protein FLJ10326 (FLJ10326), mRNA                    |
| NM_018054 | Homo sapiens homolog of rat nadrin (RICH1), mRNA                               |
| NM_018052 | Homo sapiens hypothetical protein FLJ10305 (FLJ10305), mRNA                    |
| NM_018051 | Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA                    |
| NM_018047 | Homo sapiens hypothetical protein FLJ10290 (FLJ10290), mRNA                    |
| NM_018043 | Homo sapiens hypothetical protein FLJ10261 (FLJ10261), mRNA                    |
| NM_018040 | Homo sapiens hypothetical protein FLJ10252 (FLJ10252), mRNA                    |
| NM_018039 | Homo sapiens hypothetical protein FLJ10251 (FLJ10251), mRNA                    |
| NM_018038 | Homo sapiens hypothetical protein FLJ10246 (FLJ10246), mRNA                    |
| NM_018035 | Homo sapiens hypothetical protein FLJ10241 (FLJ10241), mRNA                    |
| NM_018034 | Homo sapiens hypothetical protein FLJ10233 (FLJ10233), mRNA                    |
| NM_018033 | Homo sapiens hypothetical protein FLJ10232 (FLJ10232), mRNA                    |
| NM_018026 | Homo sapiens hypothetical protein FLJ10209 (FLJ10209), mRNA                    |
| NM_018025 | Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA                    |
| NM_018011 | Homo sapiens hypothetical protein FLJ10154 (FLJ10154), mRNA                    |
| NM_018009 | Homo sapiens hypothetical protein FLJ10143 (FLJ10143), mRNA                    |
| NM_018008 | Homo sapiens hypothetical protein FLJ10142 (FLJ10142), mRNA                    |
| NM_018001 | Homo sapiens hypothetical protein FLJ10120 (FLJ10120), mRNA                    |
| NM_017994 | Homo sapiens hypothetical protein FLJ10099 (FLJ10099), mRNA                    |
| NM_017993 | Homo sapiens hypothetical protein FLJ10094 (FLJ10094), mRNA                    |
| NM_017988 | Homo sapiens hypothetical protein FLJ10074 (FLJ10074), mRNA                    |
| NM_017987 | Homo sapiens Run- and FYVE-domain containing protein (Rabip4R), mRNA           |
| NM_017976 | Homo sapiens hypothetical protein FLJ10038 (FLJ10038), mRNA                    |
| NM_018409 | Homo sapiens hypothetical protein DKFZp761O0113 (DKFZp761O0113), mRNA          |
| NM_017601 | Homo sapiens hypothetical protein DKFZp761H221 (DKFZp761H221), mRNA            |
| NM_018713 | Homo sapiens hypothetical protein DKFZp547M236 (DKFZp547M236), mRNA            |
| NM_017606 | Homo sapiens hypothetical protein DKFZp434K1210 (DKFZp434K1210), mRNA          |
| NM_017546 | Homo sapiens hypothetical protein (C40), mRNA                                  |
| NM_018458 | Homo sapiens uncharacterized bone marrow protein BM042 (BM042), mRNA           |
| NM_018456 | Homo sapiens uncharacterized bone marrow protein BM040 (BM040), mRNA           |
| NM_018455 | Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA           |
| NM_018453 | Homo sapiens uncharacterized bone marrow protein BM036 (BM036), mRNA           |
| NM_018452 | Homo sapiens chromosome 6 open reading frame 35 (C6orf35), mRNA                |
| NM_018489 | Homo sapiens hypothetical protein ASH1 (ASH1), mRNA                            |
| NM_004227 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 3 (PSCD3), mRNA |
| NM_007014 | Homo sapiens Nedd-4-like ubiquitin-protein ligase (WWP2), mRNA                 |
| NM_017431 | Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit      |

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|-----------|--|
|           | (PRKAG3), mRNA   |
| NM_017426 | Homo sapiens nucleoporin 54kD (NUP54), mRNA  |
| NM_016950 | Homo sapiens testican 3 (HSAJ1454), mRNA   |
| NM_017421 | Homo sapiens methyltransferase COQ3 (COQ3), mRNA   |
| NM_006854 | Homo sapiens KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2 (KDEL2), mRNA |
| NM_015976 | Homo sapiens sorting nexin 7 (SNX7), mRNA  |
| NM_016577 | Homo sapiens RAB6B, member RAS oncogene family (RAB6B), mRNA   |
| NM_016559 | Homo sapiens PXR2b protein (PXR2b), mRNA   |
| NM_016297 | Homo sapiens prenylcysteine lyase (PCL1), mRNA   |
| NM_016524 | Homo sapiens B/K protein (LOC51760), mRNA  |
| NM_016507 | Homo sapiens CDC2-related protein kinase 7 (CrkRS), mRNA   |
| NM_016446 | Homo sapiens NAG-5 protein (LOC51754), mRNA  |
| NM_016382 | Homo sapiens natural killer cell receptor 2B4 (CD244), mRNA  |
| NM_016354 | Homo sapiens solute carrier family 21 (organic anion transporter), member 12 (SLC21A12), mRNA        |
| NM_016298 | Homo sapiens muscle disease-related protein (LOC51725), mRNA   |
| NM_016290 | Homo sapiens retinoid x receptor interacting protein (LOC51720), mRNA                                |
| NM_016280 | Homo sapiens carboxylesterase-related protein (LOC51716), mRNA                                       |
| NM_016229 | Homo sapiens cytochrome b5 reductase b5R.2 (LOC51700), mRNA  |
| NM_016213 | Homo sapiens thyroid hormone receptor interactor 4 (TRIP4), mRNA                                     |
| NM_016169 | Homo sapiens suppressor of fused homolog (Drosophila) (SUFU), mRNA                                   |
| NM_016084 | Homo sapiens RAS, dexamethasone-induced 1 (RASD1), mRNA  |
| NM_016077 | Homo sapiens CGI-147 protein (LOC51651), mRNA  |
| NM_016023 | Homo sapiens CGI-77 protein (LOC51633), mRNA   |
| NM_016021 | Homo sapiens non-canonical ubiquitin conjugating enzyme 1 (NCUBE1), mRNA                             |
| NM_016003 | Homo sapiens DKFZP434J154 protein (DKFZP434J154), mRNA   |
| NM_015981 | Homo sapiens calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha (CAMK2A), mRNA        |
| NM_015949 | Homo sapiens CGI-20 protein (LOC51608), mRNA   |
| NM_015881 | Homo sapiens dickkopf homolog 3 (Xenopus laevis) (DKK3), mRNA  |
| NM_016619 | Homo sapiens hypothetical protein (LOC51316), mRNA   |
| NM_016598 | Homo sapiens DHHCl protein (LOC51304), mRNA  |
| NM_016589 | Homo sapiens M5-14 protein (LOC51300), mRNA  |
| NM_016588 | Homo sapiens neuritin (LOC51299), mRNA   |
| NM_016582 | Homo sapiens peptide transporter 3 (PHT2), mRNA  |
| NM_016570 | Homo sapiens CDA14 (LOC51290), mRNA  |
| NM_016565 | Homo sapiens E2IG2 protein (LOC51287), mRNA  |
| NM_016561 | Homo sapiens apoptosis regulator (LOC51283), mRNA  |
| NM_016526 | Homo sapiens GS15 (LOC51272), mRNA   |
| NM_016518 | Homo sapiens pipecolic acid oxidase (PIPOX), mRNA  |
| NM_016495 | Homo sapiens hypothetical protein (LOC51256), mRNA   |
| NM_016486 | Homo sapiens hypothetical protein (LOC51249), mRNA   |
| NM_016477 | Homo sapiens forkhead box P1 (FOXP1), mRNA   |
| NM_016465 | Homo sapiens hypothetical protein (LOC51238), mRNA   |
| NM_016456 | Homo sapiens hypothetical protein (LOC51235), mRNA   |
| NM_016350 | Homo sapiens ninein (GSK3B interacting protein) (NIN), mRNA  |
| NM_016274 | Homo sapiens CK2 interacting protein 1; HQ0024c protein (LOC51177), mRNA                             |
| NM_016261 | Homo sapiens delta-tubulin (LOC51174), mRNA  |
| NM_016216 | Homo sapiens debranching enzyme homolog 1 (S. cerevisiae) (DBR1), mRNA                               |
| NM_016208 | Homo sapiens VPS28 protein (LOC51160), mRNA  |
| NM_016206 | Homo sapiens colon carcinoma related protein (LOC51159), mRNA  |

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| NM_016185 | Homo sapiens hematological and neurological expressed 1 (HNI), mRNA                           |
| NM_016181 | Homo sapiens melanoma antigen (LOC51152), mRNA  |
| NM_016139 | Homo sapiens 16.7Kd protein (LOC51142), mRNA  |
| NM_016129 | Homo sapiens COP9 constitutive photomorphogenic homolog subunit 4 (Arabidopsis) (COPS4), mRNA |
| NM_016122 | Homo sapiens NY-REN-58 antigen (LOC51134), mRNA   |
| NM_016119 | Homo sapiens putative zinc finger protein NY-REN-34 antigen (LOC51131), mRNA                  |
| NM_016103 | Homo sapiens GTP-binding protein Sara (LOC51128), mRNA  |
| NM_016099 | Homo sapiens HSPC041 protein (LOC51125), mRNA   |
| NM_016096 | Homo sapiens HSPC038 protein (LOC51123), mRNA   |
| NM_016037 | Homo sapiens CGI-94 protein (LOC51118), mRNA  |
| NM_016014 | Homo sapiens CGI-67 protein (LOC51104), mRNA  |
| NM_015997 | Homo sapiens CGI-41 protein (LOC51093), mRNA  |
| NM_015974 | Homo sapiens lambda-crystallin (LOC51084), mRNA   |
| NM_015973 | Homo sapiens galanin-related peptide (LOC51083), mRNA   |
| NM_015972 | Homo sapiens RNA polymerase I 16 kDa subunit (LOC51082), mRNA                                 |
| NM_015953 | Homo sapiens eNOS interacting protein (NOSIP), mRNA   |
| NM_015936 | Homo sapiens CGI-04 protein (LOC51067), mRNA  |
| NM_015895 | Homo sapiens geminin (LOC51053), mRNA   |
| NM_015882 | Homo sapiens RIG-like 5-6 (LOC51048), mRNA  |
| NM_015853 | Homo sapiens ORF (LOC51035), mRNA   |
| NM_016080 | Homo sapiens CGI-150 protein (LOC51031), mRNA   |
| NM_016078 | Homo sapiens CGI-148 protein (LOC51030), mRNA   |
| NM_016076 | Homo sapiens CGI-146 protein (LOC51029), mRNA   |
| NM_016052 | Homo sapiens CGI-115 protein (LOC51018), mRNA   |
| NM_016049 | Homo sapiens CGI-112 protein (LOC51016), mRNA   |
| NM_015940 | Homo sapiens CGI-10 protein (LOC51004), mRNA  |
| NM_016505 | Homo sapiens hypothetical protein (HSPC251), mRNA   |
| NM_016485 | Homo sapiens hypothetical protein (HSPC228), mRNA   |
| NM_016472 | Homo sapiens hypothetical protein (HSPC210), mRNA   |
| NM_016464 | Homo sapiens hypothetical protein (HSPC196), mRNA   |
| NM_016462 | Homo sapiens hypothetical protein (HSPC194), mRNA   |
| NM_016535 | Homo sapiens HSPC189 protein (HSPC189), mRNA  |
| NM_016404 | Homo sapiens hypothetical protein (HSPC152), mRNA   |
| NM_016403 | Homo sapiens hypothetical protein (HSPC148), mRNA   |
| NM_016399 | Homo sapiens hypothetical protein (HSPC132), mRNA   |
| NM_016395 | Homo sapiens butyrate-induced transcript 1 (HSPC121), mRNA                                    |
| NM_016387 | Homo sapiens hypothetical protein (HSPC060), mRNA   |
| NM_016101 | Homo sapiens hypothetical protein (HSPC031), mRNA   |
| NM_015918 | Homo sapiens homolog of yeast RNase MRP/RNase P protein Pop5 (POP5), mRNA                     |
| NM_016257 | Homo sapiens hippocalcin-like protein 4 (HPCAL4), mRNA  |
| NM_016287 | Homo sapiens HP1-BP74 (HP1-BP74), mRNA  |
| NM_015888 | Homo sapiens hook1 protein (HOOK1), mRNA  |
| NM_015852 | Homo sapiens Krueppel-related zinc finger protein (H-plk), mRNA                               |
| NM_016451 | Homo sapiens coatomer protein complex, subunit beta (COPB), mRNA                              |
| NM_015986 | Homo sapiens cytokine receptor-like factor 3 (CRLF3), mRNA                                    |
| NM_016204 | Homo sapiens growth differentiation factor 2 (GDF2), mRNA                                     |
| NM_016617 | Homo sapiens hypothetical protein (BM-002), mRNA  |
| NM_014822 | Homo sapiens SEC24 related gene family, member D (S. cerevisiae) (SEC24D), mRNA               |

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| NM_014059 | Homo sapiens RGC32 protein (RGC32), mRNA                                      |
| NM_014040 | Homo sapiens PTD015 protein (PTD015), mRNA                                    |
| NM_014039 | Homo sapiens PTD012 protein (PTD012), mRNA                                    |
| NM_014111 | Homo sapiens PRO2086 protein (PRO2086), mRNA                                  |
| NM_014106 | Homo sapiens PRO1914 protein (PRO1914), mRNA                                  |
| NM_014104 | Homo sapiens PRO1880 protein (PRO1880), mRNA                                  |
| NM_014100 | Homo sapiens PRO1770 protein (PRO1770), mRNA                                  |
| NM_014137 | Homo sapiens PRO0650 protein (PRO0650), mRNA                                  |
| NM_014127 | Homo sapiens PRO0456 protein (PRO0456), mRNA                                  |
| NM_014123 | Homo sapiens PRO0246 protein (PRO0246), mRNA                                  |
| NM_014114 | Homo sapiens PRO0097 protein (PRO0097), mRNA                                  |
| NM_014113 | Homo sapiens PRO0038 protein (PRO0038), mRNA                                  |
| NM_014048 | Homo sapiens KIAA1243 protein (KIAA1243), mRNA                                |
| NM_015368 | Homo sapiens pannexin 1 (PANX1), mRNA   |
| NM_014910 | Homo sapiens KIAA1084 protein (KIAA1084), mRNA                                |
| NM_014916 | Homo sapiens KIAA1079 protein (KIAA1079), mRNA                                |
| NM_014967 | Homo sapiens KIAA1018 protein (KIAA1018), mRNA                                |
| NM_014953 | Homo sapiens mitotic control protein dis3 homolog (KIAA1008), mRNA            |
| NM_014954 | Homo sapiens KIAA0985 protein (KIAA0985), mRNA                                |
| NM_014917 | Homo sapiens netrin G1 (KIAA0976), mRNA                                       |
| NM_014930 | Homo sapiens KIAA0972 protein (KIAA0972), mRNA                                |
| NM_014907 | Homo sapiens KIAA0967 protein (KIAA0967), mRNA                                |
| NM_014912 | Homo sapiens KIAA0940 protein (KIAA0940), mRNA                                |
| NM_014021 | Homo sapiens KIAA0923 protein (KIAA0923), mRNA                                |
| NM_014899 | Homo sapiens KIAA0878 protein (KIAA0878), mRNA                                |
| NM_014951 | Homo sapiens KIAA0844 protein (KIAA0844), mRNA                                |
| NM_014729 | Homo sapiens KIAA0808 gene product (KIAA0808), mRNA                           |
| NM_014813 | Homo sapiens KIAA0806 gene product (KIAA0806), mRNA                           |
| NM_014829 | Homo sapiens RNA helicase (KIAA0801), mRNA                                    |
| NM_014698 | Homo sapiens KIAA0792 gene product (KIAA0792), mRNA                           |
| NM_014824 | Homo sapiens KIAA0769 gene product (KIAA0769), mRNA                           |
| NM_014677 | Homo sapiens KIAA0751 gene product (KIAA0751), mRNA                           |
| NM_014705 | Homo sapiens KIAA0716 gene product (KIAA0716), mRNA                           |
| NM_014861 | Homo sapiens KIAA0703 gene product (KIAA0703), mRNA                           |
| NM_014721 | Homo sapiens KIAA0680 gene product (KIAA0680), mRNA                           |
| NM_014827 | Homo sapiens KIAA0663 gene product (KIAA0663), mRNA                           |
| NM_014645 | Homo sapiens KIAA0635 gene product (KIAA0635), mRNA                           |
| NM_014664 | Homo sapiens KIAA0615 gene product (KIAA0615), mRNA                           |
| NM_014834 | Homo sapiens KIAA0563 gene product (KIAA0563), mRNA                           |
| NM_014696 | Homo sapiens KIAA0514 gene product (KIAA0514), mRNA                           |
| NM_014732 | Homo sapiens KIAA0513 gene product (KIAA0513), mRNA                           |
| NM_014710 | Homo sapiens KIAA0443 gene product (KIAA0443), mRNA                           |
| NM_014797 | Homo sapiens KIAA0441 gene product (KIAA0441), mRNA                           |
| NM_014819 | Homo sapiens KIAA0438 gene product (KIAA0438), mRNA                           |
| NM_015216 | Homo sapiens KIAA0433 protein (KIAA0433), mRNA                                |
| NM_015251 | Homo sapiens KIAA0431 protein (KIAA0431), mRNA                                |
| NM_015185 | Homo sapiens Cdc42 guanine nucleotide exchange factor (GEF) 9 (ARHGEF9), mRNA |
| NM_014711 | Homo sapiens KIAA0419 gene product (KIAA0419), mRNA                           |
| NM_015564 | Homo sapiens KIAA0416 protein (KIAA0416), mRNA                                |
| NM_014778 | Homo sapiens KIAA0410 gene product (KIAA0410), mRNA                           |

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| NM_014659 | Homo sapiens KIAA0377 gene product (KIAA0377), mRNA   |
| NM_014639 | Homo sapiens KIAA0372 gene product (KIAA0372), mRNA   |
| NM_014786 | Homo sapiens KIAA0337 gene product (KIAA0337), mRNA   |
| NM_014845 | Homo sapiens KIAA0274 gene product (KIAA0274), mRNA   |
| NM_014745 | Homo sapiens KIAA0233 gene product (KIAA0233), mRNA   |
| NM_014643 | Homo sapiens KIAA0222 gene product (KIAA0222), mRNA   |
| NM_014674 | Homo sapiens KIAA0212 gene product (KIAA0212), mRNA   |
| NM_014720 | Homo sapiens Ste20-related serine/threonine kinase (SLK), mRNA                                  |
| NM_014761 | Homo sapiens KIAA0174 gene product (KIAA0174), mRNA   |
| NM_014730 | Homo sapiens KIAA0152 gene product (KIAA0152), mRNA   |
| NM_014661 | Homo sapiens KIAA0140 gene product (KIAA0140), mRNA   |
| NM_014777 | Homo sapiens KIAA0133 gene product (KIAA0133), mRNA   |
| NM_014815 | Homo sapiens KIAA0130 gene product (KIAA0130), mRNA   |
| NM_014755 | Homo sapiens transcriptional regulator interacting with the PHS-bromodomain 2 (TRIP-Br2), mRNA  |
| NM_014628 | Homo sapiens gene predicted from cDNA with a complete coding sequence (KIAA0110), mRNA          |
| NM_014814 | Homo sapiens KIAA0107 gene product (KIAA0107), mRNA   |
| NM_014752 | Homo sapiens KIAA0102 gene product (KIAA0102), mRNA   |
| NM_014780 | Homo sapiens KIAA0076 gene product (KIAA0076), mRNA   |
| NM_014882 | Homo sapiens KIAA0053 gene product (KIAA0053), mRNA   |
| NM_014750 | Homo sapiens KIAA0008 gene product (KIAA0008), mRNA   |
| NM_015684 | Homo sapiens mitochondrial ATP synthase regulatory component factor B (ATPW), mRNA              |
| NM_014186 | Homo sapiens HSPC166 protein (HSPC166), mRNA  |
| NM_014184 | Homo sapiens HSPC163 protein (HSPC163), mRNA  |
| NM_014181 | Homo sapiens HSPC159 protein (HSPC159), mRNA  |
| NM_014179 | Homo sapiens HSPC157 protein (HSPC157), mRNA  |
| NM_014166 | Homo sapiens HSPC126 protein (HSPC126), mRNA  |
| NM_014155 | Homo sapiens HSPC063 protein (HSPC063), mRNA  |
| NM_014038 | Homo sapiens HSPC028 protein (HSPC028), mRNA  |
| NM_014017 | Homo sapiens HSPC003 protein (HSPC003), mRNA  |
| NM_014053 | Homo sapiens FLVCR protein (FLVCR), mRNA  |
| NM_015400 | Homo sapiens DKFZP586N0721 protein (DKFZP586N0721), mRNA  |
| NM_015583 | Homo sapiens DKFZP586M0622 protein (DKFZP586M0622), mRNA  |
| NM_015485 | Homo sapiens DKFZP566K023 protein (DKFZP566K023), mRNA  |
| NM_014043 | Homo sapiens DKFZP564O123 protein (DKFZP564O123), mRNA  |
| NM_015387 | Homo sapiens preimplantation protein 3 (PREI3), mRNA  |
| NM_014056 | Homo sapiens DKFZP564K247 protein (DKFZP564K247), mRNA  |
| NM_015623 | Homo sapiens putative ankyrin-repeat containing protein (DKFZP564D166), mRNA                    |
| NM_015582 | Homo sapiens DKFZP564B147 protein (DKFZP564B147), mRNA  |
| NM_015610 | Homo sapiens DKFZP434J154 protein (DKFZP434J154), mRNA  |
| NM_015590 | Homo sapiens DKFZP434F1735 protein (DKFZP434F1735), mRNA  |
| NM_015644 | Homo sapiens DKFZP434B103 protein (DKFZP434B103), mRNA  |
| NM_015396 | Homo sapiens DKFZP434A043 protein (DKFZP434A043), mRNA  |
| NM_014058 | Homo sapiens DESC1 protein (DESC1), mRNA  |
| NM_015680 | Homo sapiens hypothetical protein (CGI-57), mRNA  |
| NM_015379 | Homo sapiens brain protein I3 (BRI3), mRNA  |
| NM_014580 | Homo sapiens solute carrier family 2, (facilitated glucose transporter) member 8 (SLC2A8), mRNA |
| NM_014280 | Homo sapiens DnaJ (Hsp40) homolog, subfamily C, member 8 (DNAJC8),                              |

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|           | mRNA  |
| NM_014313 | Homo sapiens small membrane protein 1 (SMP1), mRNA  |
| NM_014229 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, GABA), member 11 (SLC6A11), mRNA          |
| NM_014575 | Homo sapiens schwannomin interacting protein 1 (SCHIP1), mRNA   |
| NM_014402 | Homo sapiens low molecular mass ubiquinone-binding protein (9.5kD) (QP-C), mRNA                               |
| NM_014394 | Homo sapiens growth hormone inducible transmembrane protein (GHITM), mRNA                                     |
| NM_014225 | Homo sapiens protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), alpha isoform (PPP2R1A), mRNA |
| NM_014497 | Homo sapiens nuclear protein (NP220), mRNA  |
| NM_014399 | Homo sapiens tetraspan NET-6 protein (NET-6), mRNA  |
| NM_014889 | Homo sapiens metalloprotease 1 (pitrilysin family) (MPI), mRNA  |
| NM_014484 | Homo sapiens molybdenum cofactor synthesis 3 (MOCS3), mRNA  |
| NM_014447 | Homo sapiens arfaptin 1 (HSU52521), mRNA  |
| NM_014350 | Homo sapiens TNF-induced protein (GG2-1), mRNA  |
| NM_014478 | Homo sapiens calcitonin gene-related peptide-receptor component protein (CGRP-RCP), mRNA                      |
| NM_014482 | Homo sapiens bone morphogenetic protein 10 (BMP10), mRNA  |
| NM_014474 | Homo sapiens acid sphingomyelinase-like phosphodiesterase (ASML3B), mRNA                                      |
| NM_014480 | Homo sapiens zinc finger protein (AF020591), mRNA   |
| NM_014576 | Homo sapiens Apobec-1 complementation factor; APOBEC-1 stimulating protein (ACF), mRNA                        |
| NM_005884 | Homo sapiens p21(CDKN1A)-activated kinase 4 (PAK4), mRNA  |
| NM_013434 | Homo sapiens calsenilin, presenilin binding protein, EF hand transcription factor (CSEN), mRNA                |
| NM_012446 | Homo sapiens single-stranded DNA binding protein 2 (SSBP2), mRNA  |
| NM_013235 | Homo sapiens putative ribonuclease III (RNASE3L), mRNA  |
| NM_013349 | Homo sapiens secreted protein of unknown function (SPUF), mRNA  |
| NM_013323 | Homo sapiens sorting nexin 11 (SNX11), mRNA   |
| NM_013388 | Homo sapiens prolactin regulatory element binding (PREB), mRNA  |
| NM_013328 | Homo sapiens pyrroline 5-carboxylate reductase isoform (P5CR2), mRNA  |
| NM_013370 | Homo sapiens pregnancy-induced growth inhibitor (OKL38), mRNA   |
| NM_013277 | Homo sapiens Rac GTPase activating protein 1 (RACGAP1), mRNA  |
| NM_013285 | Homo sapiens nucleolar GTPase (HUMAQUANTIG), mRNA   |
| NM_013320 | Homo sapiens host cell factor 2 (HCF-2), mRNA   |
| NM_013391 | Homo sapiens dimethylglycine dehydrogenase precursor (DMGDH), mRNA  |
| NM_013253 | Homo sapiens dickkopf homolog 3 (Xenopus laevis) (DKK3), mRNA   |
| NM_013339 | Homo sapiens dolichyl-P-Glc:Man9GlcNAc2-PP-dolichylglucosyltransferase (ALG6), mRNA                           |
| NM_004120 | Homo sapiens guanylate binding protein 2, interferon-inducible (GBP2), mRNA                                   |
| NM_005690 | Homo sapiens dynamin 1-like (DNM1L), transcript variant 3, mRNA   |
| NM_012063 | Homo sapiens dynamin 1-like (DNM1L), transcript variant 2, mRNA   |
| NM_012470 | Homo sapiens transportin-SR (TRN-SR), mRNA  |
| NM_012252 | Homo sapiens transcription factor EC (TFEC), mRNA   |
| NM_012250 | Homo sapiens related RAS viral (r-ras) oncogene homolog 2 (RRAS2), mRNA                                       |
| NM_012249 | Homo sapiens ras-like protein (TC10), mRNA  |
| NM_012388 | Homo sapiens pallidin homolog (mouse) (PLDN), mRNA  |
| NM_012322 | Homo sapiens U6 snRNA-associated Sm-like protein (LSM5), mRNA   |
| NM_012316 | Homo sapiens karyopherin alpha 6 (importin alpha 7) (KPNA6), mRNA   |

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| NM_012189 | Homo sapiens fibrousheathin II (FSP-2), mRNA  |
| NM_012081 | Homo sapiens ELL-RELATED RNA POLYMERASE II, ELONGATION FACTOR (ELL2), mRNA  |
| NM_003996 | Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 2, mRNA  |
| NM_005260 | Homo sapiens growth differentiation factor 9 (GDF9), mRNA   |
| NM_007352 | Homo sapiens elastase 3B, pancreatic (ELA3B), mRNA  |
| NM_006685 | Homo sapiens proline rich 3 (PROL3), mRNA   |
| NM_007357 | Homo sapiens low density lipoprotein receptor defect C complementing (LDLC), mRNA   |
| NM_004133 | Homo sapiens hepatocyte nuclear factor 4, gamma (HNF4G), mRNA   |
| NM_003144 | Homo sapiens signal sequence receptor, alpha (translocon-associated protein alpha) (SSR1), mRNA   |
| NM_007324 | Homo sapiens MAD, mothers against decapentaplegic homolog (Drosophila) interacting protein, receptor activation anchor (MADHIP), transcript variant 1, mRNA |
| NM_007323 | Homo sapiens MAD, mothers against decapentaplegic homolog (Drosophila) interacting protein, receptor activation anchor (MADHIP), transcript variant 2, mRNA |
| NM_005162 | Homo sapiens angiotensin receptor-like 2 (AGTRL2), mRNA   |
| NM_005501 | Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), transcript variant b, mRNA                                       |
| NM_007144 | Homo sapiens zinc finger protein 144 (Mel-18) (ZNF144), mRNA  |
| NM_007286 | Homo sapiens synaptopodin (KIAA1029), mRNA  |
| NM_007199 | Homo sapiens interleukin-1 receptor-associated kinase M (IRAK-M), mRNA  |
| NM_007283 | Homo sapiens monoglyceride lipase (MGLL), mRNA  |
| NM_007241 | Homo sapiens EAP30 subunit of ELL complex (EAP30), mRNA   |
| NM_007212 | Homo sapiens ring finger protein 2 (RNF2), mRNA   |
| NM_007236 | Homo sapiens calcium binding protein P22 (CHP), mRNA  |
| NM_007063 | Homo sapiens vascular Rab-GAP/TBC-containing (VRP), mRNA  |
| NM_007027 | Homo sapiens topoisomerase (DNA) II binding protein (TOPBP1), mRNA  |
| NM_006938 | Homo sapiens small nuclear ribonucleoprotein D1 polypeptide (16kD) (SNRPD1), mRNA   |
| NM_006937 | Homo sapiens SMT3 suppressor of mif two 3 homolog 2 (yeast) (SMT3H2), mRNA  |
| NM_007029 | Homo sapiens stathmin-like 2 (STMN2), mRNA  |
| NM_007042 | Homo sapiens ribonuclease P (14kD) (RPP14), mRNA  |
| NM_006907 | Homo sapiens pyrroline-5-carboxylate reductase 1 (PYCR1), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_007059 | Homo sapiens kaptin (actin binding protein) (KPTN), mRNA  |
| NM_007069 | Homo sapiens HRAS-like suppressor 3 (HRASLS3), mRNA   |
| NM_006895 | Homo sapiens histamine N-methyltransferase (HNMT), mRNA   |
| NM_007071 | Homo sapiens HERV-H LTR-associating 3 (HHLA3), mRNA   |
| NM_007067 | Homo sapiens histone acetyltransferase (HBOA), mRNA   |
| NM_007006 | Homo sapiens cleavage and polyadenylation specific factor 5, 25 kD subunit (CPSF5), mRNA  |
| NM_007053 | Homo sapiens natural killer cell receptor, immunoglobulin superfamily member (BY55), mRNA   |
| NM_006754 | Homo sapiens synaptophysin-like protein (SYPL), mRNA  |
| NM_006802 | Homo sapiens splicing factor 3a, subunit 3, 60kD (SF3A3), mRNA  |
| NM_006842 | Homo sapiens splicing factor 3b, subunit 2, 145kD (SF3B2), mRNA   |
| NM_006834 | Homo sapiens RAB32, member RAS oncogene family (RAB32), mRNA  |

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| NM_006875 | Homo sapiens pim-2 oncogene (PIM2), mRNA   |
| NM_006810 | Homo sapiens for protein disulfide isomerase-related (PDIR), mRNA  |
| NM_003609 | Homo sapiens HIRA interacting protein 3 (HIRIP3), mRNA   |
| NM_006820 | Homo sapiens chromosome 1 open reading frame 29 (C1orf29), mRNA  |
| NM_006848 | Homo sapiens hepatitis delta antigen-interacting protein A (DIPA), mRNA  |
| NM_006876 | Homo sapiens UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 6 (B3GNT6), mRNA                          |
| NM_006653 | Homo sapiens sucl-associated neurotrophic factor target 2 (FGFR signalling adaptor) (SNT-2), mRNA                  |
| NM_006638 | Homo sapiens ribonuclease P, 40kD subunit (RPP40), mRNA  |
| NM_004163 | Homo sapiens RAB27B, member RAS oncogene family (RAB27B), mRNA   |
| NM_006713 | Homo sapiens activated RNA polymerase II transcription cofactor 4 (PC4), mRNA                                      |
| NM_006601 | Homo sapiens inactive progesterone receptor, 23 kD (P23), mRNA   |
| NM_006675 | Homo sapiens tetraspan transmembrane 4 super family (NET-5), mRNA  |
| NM_006501 | Homo sapiens myelin-associated oligodendrocyte basic protein (MOBP), mRNA  |
| NM_006612 | Homo sapiens kinesin family member 1C (KIF1C), mRNA  |
| NM_006567 | Homo sapiens phenylalanine-tRNA synthetase (FARS1), nuclear gene encoding mitochondrial protein, mRNA              |
| NM_006594 | Homo sapiens adaptor-related protein complex 4, beta 1 subunit (AP4B1), mRNA                                       |
| NM_006621 | Homo sapiens S-adenosylhomocysteine hydrolase-like 1 (AHCYL1), mRNA  |
| NM_006472 | Homo sapiens thioredoxin interacting protein (TXNIP), mRNA   |
| NM_006388 | Homo sapiens HIV-1 Tat interactive protein, 60 kD (HTATIP), mRNA   |
| NM_006281 | Homo sapiens serine/threonine kinase 3 (STE20 homolog, yeast) (STK3), mRNA   |
| NM_006401 | Homo sapiens acidic protein rich in leucines (SSP29), mRNA   |
| NM_006425 | Homo sapiens step II splicing factor SLU7 (SLU7), mRNA   |
| NM_006359 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 6 (SLC9A6), mRNA                         |
| NM_006328 | Homo sapiens RNA binding motif protein 14 (RBM14), mRNA  |
| NM_006466 | Homo sapiens polymerase (RNA) III (DNA directed) polypeptide F (39 kD) (POLR3F), mRNA                              |
| NM_006467 | Homo sapiens polymerase (RNA) III (DNA directed) (32kD) (RPC32), mRNA  |
| NM_006397 | Homo sapiens ribonuclease HI, large subunit (RNASEHI), mRNA  |
| NM_006443 | Homo sapiens putative c-Myc-responsive (RCL), mRNA   |
| NM_006390 | Homo sapiens RAN binding protein 8 (RANBP8), mRNA  |
| NM_006256 | Homo sapiens protein kinase C-like 2 (PRKCL2), mRNA  |
| NM_006254 | Homo sapiens protein kinase C, delta (PRKCD), mRNA   |
| NM_006229 | Homo sapiens pancreatic lipase-related protein 1 (PNLIPRP1), mRNA  |
| NM_006319 | Homo sapiens CDP-diacylglycerol--inositol 3-phosphatidyltransferase (phosphatidylinositol synthase) (CDIPT), mRNA  |
| NM_006219 | Homo sapiens phosphoinositide-3-kinase, catalytic, beta polypeptide (PIK3CB), mRNA                                 |
| NM_006346 | Homo sapiens progesterone-induced blocking factor 1 (PIBF1), mRNA  |
| NM_006473 | Homo sapiens TAF6-like RNA polymerase II, p300/CBP-associated factor (PCAF)-associated factor, 65 kD (TAF6L), mRNA |
| NM_006396 | Homo sapiens Sjogren's syndrome/scleroderma autoantigen 1 (SSSCA1), mRNA   |
| NM_006428 | Homo sapiens melanoma-associated antigen recognised by cytotoxic T lymphocytes (MAAT1), mRNA                       |
| NM_006475 | Homo sapiens osteoblast specific factor 2 (fasciclin I-like) (OSF-2), mRNA   |
| NM_006392 | Homo sapiens nucleolar protein 5A (56kD with KKE/D repeat) (NOL5A), mRNA   |



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|           | mRNA   |
| NM_006417 | Homo sapiens interferon-induced, hepatitis C-associated microtubular aggregate protein (44kD) (MTAP44), mRNA                                 |
| NM_006405 | Homo sapiens transmembrane 9 superfamily member 1 (TM9SF1), mRNA   |
| NM_006471 | Homo sapiens myosin, light polypeptide, regulatory, non-sarcomeric (20kD) (MLCB), mRNA   |
| NM_006152 | Homo sapiens lymphoid-restricted membrane protein (LRMP), mRNA   |
| NM_006460 | Homo sapiens HMBA-inducible (HIS1), mRNA   |
| NM_006365 | Homo sapiens transcriptional activator of the c-fos promoter (CROC4), mRNA   |
| NM_006135 | Homo sapiens capping protein (actin filament) muscle Z-line, alpha 1 (CAPZA1), mRNA  |
| NM_006086 | Homo sapiens tubulin, beta, 4 (TUBB4), mRNA  |
| NM_005761 | Homo sapiens plexin C1 (PLXNC1), mRNA  |
| NM_005724 | Homo sapiens tetraspan 3 (TSPAN-3), mRNA   |
| NM_005646 | Homo sapiens TAR (HIV) RNA binding protein 1 (TARBP1), mRNA  |
| NM_005819 | Homo sapiens syntaxin 6 (STX6), mRNA   |
| NM_005866 | Homo sapiens sigma receptor (SR31747 binding protein 1) (SR-BP1), mRNA   |
| NM_005842 | Homo sapiens sprouty homolog 2 (Drosophila) (SPRY2), mRNA  |
| NM_005626 | Homo sapiens splicing factor, arginine/serine-rich 4 (SFRS4), mRNA   |
| NM_005770 | Homo sapiens small EDRK-rich factor 2 (SERF2), mRNA  |
| NM_005805 | Homo sapiens 26S proteasome-associated pad1 homolog (POH1), mRNA   |
| NM_005746 | Homo sapiens pre-B-cell colony-enhancing factor (PBEF), mRNA   |
| NM_005869 | Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA  |
| NM_005787 | Homo sapiens Not56 (D. melanogaster)-like protein (NOT56L), mRNA   |
| NM_005792 | Homo sapiens M-phase phosphoprotein 6 (MPHOSPH6), mRNA   |
| NM_005693 | Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA   |
| NM_005799 | Homo sapiens PDZ domain protein (Drosophila inaD-like) (INADL), mRNA   |
| NM_005713 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) binding protein (COL4A3BP), transcript variant 1, mRNA                         |
| NM_005878 | Homo sapiens trinucleotide repeat containing 3 (TNRC3), mRNA   |
| NM_005875 | Homo sapiens translation factor sui1 homolog (GC20), mRNA  |
| NM_005838 | Homo sapiens glycine-N-acyltransferase (GLYAT), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_005754 | Homo sapiens Ras-GTPase-activating protein SH3-domain-binding protein (G3BP), mRNA   |
| NM_005764 | Homo sapiens epithelial protein up-regulated in carcinoma, membrane associated protein 17 (DD96), mRNA                                       |
| NM_005694 | Homo sapiens COX17 homolog, cytochrome c oxidase assembly protein (yeast) (COX17), nuclear gene encoding mitochondrial protein, mRNA         |
| NM_005506 | Homo sapiens CD36 antigen (collagen type I receptor, thrombospondin receptor)-like 2 (lysosomal integral membrane protein II) (CD36L2), mRNA |
| NM_005881 | Homo sapiens branched chain alpha-ketoacid dehydrogenase kinase (BCKDK), mRNA  |
| NM_005718 | Homo sapiens actin related protein 2/3 complex, subunit 4 (20 kD) (ARPC4), mRNA  |
| NM_005717 | Homo sapiens actin related protein 2/3 complex, subunit 5 (16 kD) (ARPC5), mRNA  |
| NM_005829 | Homo sapiens adaptor-related protein complex 3, sigma 2 subunit (AP3S2), mRNA  |
| NM_005814 | Homo sapiens glycoprotein A33 (transmembrane) (GPA33), mRNA  |

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| NM_005406 | Homo sapiens Rho-associated, coiled-coil containing protein kinase 1 (ROCK1), mRNA  |
| NM_005399 | Homo sapiens protein kinase, AMP-activated, beta 2 non-catalytic subunit (PRKAB2), mRNA   |
| NM_005396 | Homo sapiens pancreatic lipase-related protein 2 (PNLIPRP2), mRNA   |
| NM_005489 | Homo sapiens SH2 domain-containing 3C (SH2D3C), mRNA  |
| NM_005479 | Homo sapiens frequently rearranged in advanced T-cell lymphomas (FRAT1), mRNA   |
| NM_005154 | Homo sapiens ubiquitin specific protease 8 (USP8), mRNA   |
| NM_005066 | Homo sapiens splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated) (SFPQ), mRNA  |
| NM_005123 | Homo sapiens nuclear receptor subfamily 1, group H, member 4 (NR1H4), mRNA  |
| NM_005046 | Homo sapiens kallikrein 7 (chymotryptic, stratum corneum) (KLK7), mRNA  |
| NM_005030 | Homo sapiens polo-like kinase (Drosophila) (PLK), mRNA  |
| NM_005014 | Homo sapiens osteomodulin (OMD), mRNA   |
| NM_005003 | Homo sapiens NADH dehydrogenase (ubiquinone) 1, alpha/beta subcomplex, 1 (8kD, SDAP) (NDUFAB1), mRNA  |
| NM_004941 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 8 (RNA helicase) (DDX8), mRNA   |
| NM_004205 | Homo sapiens ubiquitin specific protease 2 (USP2), mRNA   |
| NM_004818 | Homo sapiens prp28, U5 snRNP 100 kd protein (U5-100K), mRNA   |
| NM_004275 | Homo sapiens TRF-proximal protein (TRFP), mRNA  |
| NM_004272 | Homo sapiens Homer, neuronal immediate early gene, 1B (SYN47), mRNA   |
| NM_004177 | Homo sapiens syntaxin 3A (STX3A), mRNA  |
| NM_004719 | Homo sapiens splicing factor, arginine/serine-rich 2, interacting protein (SFRS2IP), mRNA   |
| NM_004175 | Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18kD) (SNRPD3), mRNA   |
| NM_004592 | Homo sapiens splicing factor, arginine/serine-rich 8 (suppressor-of-white-apricot homolog, Drosophila) (SFRS8), mRNA  |
| NM_004799 | Homo sapiens MAD, mothers against decapentaplegic homolog (Drosophila) interacting protein, receptor activation anchor (MADHIP), transcript variant 3, mRNA |
| NM_004875 | Homo sapiens RNA polymerase I subunit (RPA40), mRNA   |
| NM_004292 | Homo sapiens ras inhibitor (RIN1), mRNA   |
| NM_004815 | Homo sapiens PTPL1-associated RhoGAP 1 (PARG1), mRNA  |
| NM_004772 | Homo sapiens P311 protein (P311), mRNA  |
| NM_004553 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 6 (13kD) (NADH-coenzyme Q reductase) (NDUFS6), mRNA   |
| NM_004549 | Homo sapiens NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2 (14.5kD, B14.5b) (NDUFC2), mRNA   |
| NM_004271 | Homo sapiens MD-1, RP105-associated (MD-1), mRNA  |
| NM_004672 | Homo sapiens mitogen-activated protein kinase kinase kinase 6 (MAP3K6), mRNA  |
| NM_004828 | Homo sapiens lymphocyte antigen 95 (activating NK-receptor; NK-p44) (LY95), mRNA  |
| NM_004735 | Homo sapiens leucine rich repeat (in FLII) interacting protein 1 (LRRFIP1), mRNA  |
| NM_004811 | Homo sapiens leupaxin (LPXN), mRNA  |
| NM_004522 | Homo sapiens kinesin family member 5C (KIF5C), mRNA   |
| NM_004905 | Homo sapiens anti-oxidant protein 2 (non-selenium glutathione peroxidase,   |

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|           | acidic calcium-independent phospholipase A2) (KIAA0106), mRNA  |
| NM_004770 | Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 2 (KCNB2), mRNA                   |
| NM_004848 | Homo sapiens basement membrane-induced gene (ICB-1), mRNA  |
| NM_004763 | Homo sapiens integrin cytoplasmic domain-associated protein 1 (ICAP-1A), transcript variant 1, mRNA            |
| NM_004814 | Homo sapiens U5 snRNP-specific 40 kDa protein (hPrp8-binding) (HPRP8BP), mRNA                                  |
| NM_004839 | Homo sapiens Homer, neuronal immediate early gene, 2 (HOMER-2B), mRNA  |
| NM_004684 | Homo sapiens SPARC-like 1 (mast9, hevin) (SPARCL1), mRNA   |
| NM_004832 | Homo sapiens glutathione-S-transferase like; glutathione transferase omega (GSTTLp28), mRNA                    |
| NM_004486 | Homo sapiens golgi autoantigen, golgin subfamily a, 2 (GOLGA2), mRNA   |
| NM_004125 | Homo sapiens guanine nucleotide binding protein 10 (GNG10), mRNA   |
| NM_004483 | Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH), mRNA                              |
| NM_004767 | Homo sapiens endothelin type b receptor-like protein 2 (ET(B)R-LP-2), mRNA                                     |
| NM_004440 | Homo sapiens EphA7 (EPHA7), mRNA   |
| NM_004757 | Homo sapiens small inducible cytokine subfamily E, member 1 (endothelial monocyte-activating) (SCYE1), mRNA    |
| NM_004427 | Homo sapiens early development regulator 2 (polyhomeotic 2 homolog) (EDR2), mRNA                               |
| NM_004422 | Homo sapiens dishevelled, dsh homolog 2 (Drosophila) (DVL2), mRNA  |
| NM_004416 | Homo sapiens deltex homolog 1 (Drosophila) (DTX1), mRNA  |
| NM_004073 | Homo sapiens cytokine-inducible kinase (CNK), mRNA   |
| NM_004365 | Homo sapiens centrin, EF-hand protein, 3 (CDC31 homolog, yeast) (CETN3), mRNA                                  |
| NM_004680 | Homo sapiens chromodomain protein, Y chromosome, 1 (CDY1), mRNA  |
| NM_004291 | Homo sapiens cocaine- and amphetamine-regulated transcript (CART), mRNA  |
| NM_004330 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 2 (BNIP2), mRNA                                      |
| NM_004024 | Homo sapiens activating transcription factor 3 (ATF3), mRNA  |
| NM_001177 | Homo sapiens ADP-ribosylation factor-like 1 (ARL1), mRNA   |
| NM_001545 | Homo sapiens immature colon carcinoma transcript 1 (ICT1), mRNA  |
| NM_001533 | Homo sapiens heterogeneous nuclear ribonucleoprotein L (HNRPL), mRNA   |
| NM_001509 | Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 1, mRNA |
| NM_001349 | Homo sapiens aspartyl-tRNA synthetase (DARS), mRNA   |
| NM_001329 | Homo sapiens C-terminal binding protein 2 (CTBP2), transcript variant 1, mRNA                                  |
| NM_000082 | Homo sapiens Cockayne syndrome 1 (classical) (CKN1), mRNA  |
| NM_001277 | Homo sapiens choline kinase (CHK), mRNA  |
| NM_001087 | Homo sapiens angio-associated, migratory cell protein (AAMP), mRNA   |
| NM_003999 | Homo sapiens oncostatin M receptor (OSMR), mRNA  |
| NM_003904 | Homo sapiens zinc finger protein 259 (ZNF259), mRNA  |
| NM_003385 | Homo sapiens visinin-like 1 (VSNL1), mRNA  |
| NM_003348 | Homo sapiens ubiquitin-conjugating enzyme E2N (UBC13 homolog, yeast) (UBE2N), mRNA                             |
| NM_003341 | Homo sapiens ubiquitin-conjugating enzyme E2E 1 (UBC4/5 homolog, yeast) (UBE2E1), mRNA                         |
| NM_003339 | Homo sapiens ubiquitin-conjugating enzyme E2D 2 (UBC4/5 homolog, yeast) (UBE2D2), mRNA                         |

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| NM_003115 | Homo sapiens UDP-N-acetylglucosamine pyrophosphorylase 1 (UAP1), mRNA  |
| NM_003305 | Homo sapiens transient receptor potential cation channel, subfamily C, member 3 (TRPC3), mRNA  |
| NM_003596 | Homo sapiens tyrosylprotein sulfotransferase 1 (TPST1), mRNA   |
| NM_003747 | Homo sapiens tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase (TNKS), mRNA  |
| NM_003569 | Homo sapiens syntaxin 7 (STX7), mRNA   |
| NM_003164 | Homo sapiens syntaxin 5A (STX5A), mRNA   |
| NM_003764 | Homo sapiens syntaxin 11 (STX11), mRNA   |
| NM_003133 | Homo sapiens signal recognition particle 9kD (SRP9), mRNA  |
| NM_003136 | Homo sapiens signal recognition particle 54kD (SRP54), mRNA  |
| NM_003131 | Homo sapiens serum response factor (c-fos serum response element-binding transcription factor) (SRF), mRNA                               |
| NM_003795 | Homo sapiens sorting nexin 3 (SNX3), mRNA  |
| NM_003096 | Homo sapiens small nuclear ribonucleoprotein polypeptide G (SNRPG), mRNA   |
| NM_003093 | Homo sapiens small nuclear ribonucleoprotein polypeptide C (SNRPC), mRNA   |
| NM_003080 | Homo sapiens sphingomyelin phosphodiesterase 2, neutral membrane (neutral sphingomyelinase) (SMPD2), mRNA                                |
| NM_003059 | Homo sapiens solute carrier family 22 (organic cation transporter), member 4 (SLC22A4), mRNA   |
| NM_003033 | Homo sapiens sialyltransferase 4A (beta-galactosidase alpha-2,3-sialyltransferase) (SIAT4A), mRNA  |
| NM_003952 | Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 2 (RPS6KB2), mRNA  |
| NM_003729 | Homo sapiens RTC domain containing 1 (RTCD1), mRNA   |
| NM_002937 | Homo sapiens ribonuclease, RNase A family, 4 (RNASE4), mRNA  |
| NM_003804 | Homo sapiens receptor (TNFRSF)-interacting serine-threonine kinase 1 (RIPK1), mRNA   |
| NM_002898 | Homo sapiens RNA binding motif, single stranded interacting protein 2 (RBMS2), mRNA  |
| NM_002886 | Homo sapiens RAP2B, member of RAS oncogene family (RAP2B), mRNA  |
| NM_003953 | Homo sapiens myelin protein zero-like 1 (MPZL1), mRNA  |
| NM_002809 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3), mRNA  |
| NM_002771 | Homo sapiens protease, serine, 3 (trypsin 3) (PRSS3), mRNA   |
| NM_002757 | Homo sapiens mitogen-activated protein kinase kinase 5 (MAP2K5), mRNA  |
| NM_002754 | Homo sapiens mitogen-activated protein kinase 13 (MAPK13), mRNA  |
| NM_003668 | Homo sapiens mitogen-activated protein kinase-activated protein kinase 5 (MAPKAPK5), mRNA  |
| NM_002718 | Homo sapiens protein phosphatase 2 (formerly 2A), regulatory subunit B" (PR 72), alpha isoform and (PR 130), beta isoform (PPP2R3), mRNA |
| NM_003622 | Homo sapiens PTPRF interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1), mRNA  |
| NM_003626 | Homo sapiens protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 1 (PPFIA1), mRNA    |
| NM_002689 | Homo sapiens polymerase (DNA-directed), alpha (70kD) (POLA2), mRNA   |
| NM_002685 | Homo sapiens polymyositis/scleroderma autoantigen 2 (100kD) (PMSCL2), mRNA   |
| NM_003876 | Homo sapiens putative receptor protein (PMI), mRNA   |
| NM_002670 | Homo sapiens plastin 1 (I isoform) (PLS1), mRNA  |
| NM_002664 | Homo sapiens pleckstrin (PLEK), mRNA   |
| NM_003559 | Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta  |

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|           | (PIP5K2B), mRNA   |
| NM_003629 | Homo sapiens phosphoinositide-3-kinase, regulatory subunit, polypeptide 3 (p55, gamma) (PIK3R3), mRNA                 |
| NM_002649 | Homo sapiens phosphoinositide-3-kinase, catalytic, gamma polypeptide (PIK3CG), mRNA                                   |
| NM_002624 | Homo sapiens prefoldin 5 (PFDN5), mRNA  |
| NM_003846 | Homo sapiens peroxisomal biogenesis factor 11B (PEX11B), mRNA   |
| NM_002617 | Homo sapiens peroxisome biogenesis factor 10 (PEX10), mRNA  |
| NM_002611 | Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 2 (PDK2), mRNA  |
| NM_000923 | Homo sapiens phosphodiesterase 4C, cAMP-specific (phosphodiesterase E1 dunce homolog, Drosophila) (PDE4C), mRNA       |
| NM_002599 | Homo sapiens phosphodiesterase 2A, cGMP-stimulated (PDE2A), mRNA  |
| NM_002504 | Homo sapiens nuclear transcription factor, X-box binding 1 (NFX1), mRNA   |
| NM_002482 | Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP), mRNA                                       |
| NM_003826 | Homo sapiens N-ethylmaleimide-sensitive factor attachment protein, gamma (NAPG), mRNA                                 |
| NM_002465 | Homo sapiens myosin binding protein C, slow type (MYBPC1), mRNA   |
| NM_002461 | Homo sapiens mevalonate (diphospho) decarboxylase (MVD), mRNA   |
| NM_003676 | Homo sapiens degenerative spermatocyte homolog, lipid desaturase (Drosophila) (DEGS), mRNA                            |
| NM_002307 | Homo sapiens lectin, galactoside-binding, soluble, 7 (galectin 7) (LGALS7), mRNA                                      |
| NM_002271 | Homo sapiens karyopherin (importin) beta 3 (KPNB3), mRNA  |
| NM_002270 | Homo sapiens karyopherin (importin) beta 2 (KPNB2), mRNA  |
| NM_002214 | Homo sapiens integrin, beta 8 (ITGB8), mRNA   |
| NM_002204 | Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), transcript variant a, mRNA |
| NM_001560 | Homo sapiens interleukin 13 receptor, alpha 1 (IL13RA1), mRNA   |
| NM_002163 | Homo sapiens interferon consensus sequence binding protein 1 (ICSBP1), mRNA   |
| NM_002156 | Homo sapiens heat shock 60kD protein 1 (chaperonin) (HSPD1), mRNA   |
| NM_002149 | Homo sapiens hippocalcin-like 1 (HPCAL1), mRNA  |
| NM_003947 | Homo sapiens huntingtin-associated protein interacting protein (duo) (HAIP), mRNA                                     |
| NM_003665 | Homo sapiens ficolin (collagen/fibrinogen domain containing) 3 (Hakata antigen) (FCN3), mRNA                          |
| NM_000842 | Homo sapiens glutamate receptor, metabotropic 5 (GRM5), mRNA  |
| NM_002053 | Homo sapiens guanylate binding protein 1, interferon-inducible, 67kD (GBP1), mRNA                                     |
| NM_001482 | Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM), mRNA                          |
| NM_002044 | Homo sapiens galactokinase 2 (GALK2), mRNA  |
| NM_001417 | Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA  |
| NM_003758 | Homo sapiens eukaryotic translation initiation factor 3, subunit 1 (alpha, 35kD) (EIF3S1), mRNA                       |
| NM_001404 | Homo sapiens eukaryotic translation elongation factor 1 gamma (EEF1G), mRNA   |
| NM_001960 | Homo sapiens eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein) (EEF1D), mRNA     |
| NM_003792 | Homo sapiens endothelial differentiation-related factor 1 (EDF1), mRNA  |
| NM_003974 | Homo sapiens docking protein 2, 56kD (DOK2), mRNA   |

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| NM_003586 | Homo sapiens double C2-like domains, alpha (DOC2A), mRNA   |
| NM_001883 | Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2), mRNA  |
| NM_001873 | Homo sapiens carboxypeptidase E (CPE), mRNA  |
| NM_001782 | Homo sapiens CD72 antigen (CD72), mRNA   |
| NM_001762 | Homo sapiens chaperonin containing TCP1, subunit 6A (zeta 1) (CCT6A), mRNA                                       |
| NM_003716 | Homo sapiens Ca <sup>2+</sup> -dependent activator protein for secretion (CADPS), mRNA                           |
| NM_003986 | Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) 1 (BBOX1), mRNA |
| NM_001674 | Homo sapiens activating transcription factor 3 (ATF3), mRNA  |
| NM_001173 | Homo sapiens Rho GTPase activating protein 5 (ARHGAP5), mRNA   |
| NM_025065 | Homo sapiens RNA processing factor 1 (RPF1), mRNA  |
| NM_024907 | Homo sapiens F-box protein FBG4 (FBG4), mRNA   |
| NM_025194 | Homo sapiens inositol 1,4,5-trisphosphate 3-kinase C (ITPKC), mRNA   |
| NM_014203 | Homo sapiens adaptor-related protein complex 2, alpha 1 subunit (AP2A1), mRNA                                    |
| NM_130786 | Homo sapiens alpha-1-B glycoprotein (A1BG), mRNA   |
| NM_031482 | Homo sapiens hypothetical protein DKFZp58610418 (DKFZP58610418), mRNA  |
| NM_015419 | Homo sapiens adlcan (DKFZp56411922), mRNA  |
| NM_015683 | Homo sapiens hypothetical protein (CLONE24945), mRNA   |
| NM_015638 | Homo sapiens chromosome 20 open reading frame 188 (C20orf188), mRNA  |
| NM_080737 | Homo sapiens synaptotagmin-like 4 (granuphilin-a) (SYTL4), mRNA  |
| NM_080723 | Homo sapiens vesicular membrane protein p24 (VMP), mRNA  |
| NM_080678 | Homo sapiens NEDD8-conjugating enzyme (NCE2), mRNA   |
| NM_080668 | Homo sapiens similar to RIKEN cDNA 2610036L13 (MGC16386), mRNA   |
| NM_080666 | Homo sapiens similar to RIKEN cDNA 2600001A11 gene (LOC112840), mRNA   |
| NM_080663 | Homo sapiens similar to RIKEN cDNA 4933424N09 gene (MGC16943), mRNA  |
| NM_080661 | Homo sapiens similar to RIKEN cDNA 0610008P16 gene (MGC15937), mRNA  |
| NM_080658 | Homo sapiens similar to RIKEN cDNA 0610006H10 gene (MGC9740), mRNA   |
| NM_080656 | Homo sapiens similar to RIKEN cDNA A430101B06 gene (MGC13017), mRNA  |
| NM_080651 | Homo sapiens similar to RIKEN cDNA 1810038N03 gene (MGC9890), mRNA   |
| NM_080650 | Homo sapiens similar to RIKEN cDNA 5730421E18 gene (MGC14798), mRNA  |
| NM_080604 | Homo sapiens tight junction protein 4 (peripheral) (TJP4), mRNA  |
| NM_080552 | Homo sapiens vesicular inhibitory amino acid transporter (VIAAT), mRNA   |
| NM_080429 | Homo sapiens aquaporin 10 (AQP10), mRNA  |
| NM_018897 | Homo sapiens axonemal dynein heavy chain 7 (DNAH7), mRNA   |
| NM_015570 | Homo sapiens autism-related protein 1 (KIAA0442), mRNA   |
| NM_015132 | Homo sapiens sorting nexin 13 (SNX13), mRNA  |
| NM_022457 | Homo sapiens similar to constitutive photomorphogenic protein 1 (Arabidopsis) (FLJ10416), mRNA                   |
| NM_030658 | Homo sapiens putative ankyrin-repeat containing protein (DKFZP564D166), mRNA                                     |
| NM_058229 | Homo sapiens F-box only protein 32 (FBXO32), mRNA  |
| NM_058188 | Homo sapiens chromosome 21 open reading frame 67 (C21orf67), mRNA  |
| NM_058187 | Homo sapiens chromosome 21 open reading frame 63 (C21orf63), mRNA  |
| NM_058171 | Homo sapiens ING1-like tumor suppressor protein (ING1-like), mRNA  |
| NM_058167 | Homo sapiens ubiquitin conjugating enzyme 6 (Ubc6p), mRNA  |
| NM_015242 | Homo sapiens centaurin, delta 2 (CENTD2), mRNA   |
| NM_054114 | Homo sapiens hypothetical protein FLJ32631 (FLJ32631), mRNA  |
| NM_054111 | Homo sapiens inositol hexaphosphate kinase 3 (IHPK3), mRNA   |

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| NM_054108 | Homo sapiens H-rev107-like protein 5 (HRLP5), mRNA  |
| NM_020794 | Homo sapiens densin-180 (KIAA1365), mRNA  |
| NM_054032 | Homo sapiens G protein-coupled receptor MRGX4 (MRGX4), mRNA                                     |
| NM_054031 | Homo sapiens G protein-coupled receptor MRGX3 (MRGX3), mRNA                                     |
| NM_054030 | Homo sapiens G protein-coupled receptor MRGX2 (MRGX2), mRNA                                     |
| NM_054023 | Homo sapiens uteroglobin-related protein 1 (UGRP1), mRNA  |
| NM_054024 | Homo sapiens melanoma inhibitory activity protein 2 (MIA2), mRNA                                |
| NM_031946 | Homo sapiens centaurin, gamma 3 (CENTG3), mRNA  |
| NM_052860 | Homo sapiens kruppel-like zinc finger protein (ZNF300), mRNA                                    |
| NM_053054 | Homo sapiens cation channel of sperm (CATSPER), mRNA  |
| NM_053053 | Homo sapiens SPT3-associated factor 42 (STAF42), mRNA   |
| NM_053048 | Homo sapiens hypothetical protein MGC16384 (MGC16384), mRNA                                     |
| NM_053047 | Homo sapiens hypothetical protein MGC16063 (MGC16063), mRNA                                     |
| NM_053040 | Homo sapiens PNAS-123 (LOC85028), mRNA  |
| NM_053039 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B28 (UGT2B28), mRNA                  |
| NM_053001 | Homo sapiens odd-skipped-related 2A protein (OSR2), mRNA  |
| NM_052997 | Homo sapiens breast cancer antigen NY-BR-1 (NY-BR-1), mRNA                                      |
| NM_052971 | Homo sapiens liver-expressed antimicrobial peptide 2 (LEAP-2), mRNA                             |
| NM_052956 | Homo sapiens medium-chain acyl-CoA synthetase (MACS1), mRNA                                     |
| NM_052942 | Homo sapiens guanylate binding protein 5 (GBP5), mRNA   |
| NM_052931 | Homo sapiens activating NK receptor (KAL1), mRNA  |
| NM_052879 | Homo sapiens c-Mpl binding protein (LOC113251), mRNA  |
| NM_030928 | Homo sapiens DNA replication factor (CDT1), mRNA  |
| NM_025185 | Homo sapiens putative ankyrin-repeat containing protein (DKFZP564D166), mRNA                    |
| NM_015179 | Homo sapiens KIAA0690 protein (KIAA0690), mRNA  |
| NM_033626 | Homo sapiens JM11 protein (JM11), mRNA  |
| NM_022735 | Homo sapiens golgi phosphoprotein 1 (GOLPH1), mRNA  |
| NM_033547 | Homo sapiens hypothetical gene MGC16733 similar to CG12113 (MGC16733), mRNA                     |
| NM_032268 | Homo sapiens nerve injury gene 283 (NIN283), mRNA   |
| NM_016167 | Homo sapiens retinoic acid repressible protein (RARG-1), mRNA                                   |
| NM_033414 | Homo sapiens hypothetical protein MGC17552 (MGC17552), mRNA                                     |
| NM_016336 | Homo sapiens non-canonical ubiquitin conjugating enzyme 1 (NCUBE1), mRNA                        |
| NM_033317 | Homo sapiens hypothetical gene ZD52F10 (ZD52F10), mRNA  |
| NM_033266 | Homo sapiens ER to nucleus signalling 2 (ERN2), mRNA  |
| NM_031955 | Homo sapiens NYD-SP12 protein (NYD-SP12), mRNA  |
| NM_033210 | Homo sapiens hypothetical protein FLJ14855 (FLJ14855), mRNA                                     |
| NM_033211 | Homo sapiens hypothetical gene supported by AF038182; BC009203 (LOC90355), mRNA                 |
| NM_033194 | Homo sapiens small heat shock protein B9 (HspB9), mRNA  |
| NM_032122 | Homo sapiens dystrobrevin binding protein 1 (DTNBPI), mRNA                                      |
| NM_020405 | Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA                                  |
| NM_033115 | Homo sapiens hypothetical protein MGC16169 (MGC16169), mRNA                                     |
| NM_033117 | Homo sapiens hypothetical protein MGC2734 (MGC2734), mRNA                                       |
| NM_033103 | Homo sapiens raphilin-like protein (LOC85415), mRNA   |
| NM_033035 | Homo sapiens thymic stromal lymphopoietin (TSLP), mRNA  |
| NM_014001 | Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 3 (GGA3), mRNA |
| NM_015149 | Homo sapiens RalGDS-like gene (RGL), mRNA   |
| NM_032937 | Homo sapiens AD038 (LOC85026), mRNA   |

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| NM_032932 | Homo sapiens hypothetical protein MGC11316 (MGC11316), mRNA                               |
| NM_032930 | Homo sapiens hypothetical protein MGC13040 (MGC13040), mRNA                               |
| NM_032918 | Homo sapiens RAS-like, estrogen-regulated, growth-inhibitor (RERG), mRNA                  |
| NM_032916 | Homo sapiens hypothetical protein MGC16279 (MGC16279), mRNA                               |
| NM_032907 | Homo sapiens hypothetical protein MGC14421 (MGC14421), mRNA                               |
| NM_032904 | Homo sapiens hypothetical protein MGC14433 (MGC14433), mRNA                               |
| NM_032900 | Homo sapiens hypothetical protein MGC14258 (MGC14258), mRNA                               |
| NM_032895 | Homo sapiens hypothetical protein MGC14376 (MGC14376), mRNA                               |
| NM_032888 | Homo sapiens KIAA1870 protein (KIAA1870), mRNA  |
| NM_032886 | Homo sapiens hypothetical protein MGC15912 (MGC15912), mRNA                               |
| NM_032884 | Homo sapiens hypothetical protein MGC15882 (MGC15882), mRNA                               |
| NM_032876 | Homo sapiens hypothetical protein MGC15563 (MGC15563), mRNA                               |
| NM_032875 | Homo sapiens hypothetical protein MGC15482 (MGC15482), mRNA                               |
| NM_032874 | Homo sapiens hypothetical protein MGC15438 (MGC15438), mRNA                               |
| NM_032872 | Homo sapiens NADPH oxidase-related, C2 domain-containing protein (JFC1), mRNA             |
| NM_032871 | Homo sapiens tumor necrosis factor receptor superfamily, member 19-like (TNFRSF19L), mRNA |
| NM_032866 | Homo sapiens hypothetical protein FLJ14957 (FLJ14957), mRNA                               |
| NM_032860 | Homo sapiens hypothetical protein FLJ14909 (FLJ14909), mRNA                               |
| NM_032858 | Homo sapiens hypothetical protein FLJ14904 (FLJ14904), mRNA                               |
| NM_032852 | Homo sapiens AUT-like 1, cysteine endopeptidase (S. cerevisiae) (AUTL1), mRNA             |
| NM_032848 | Homo sapiens hypothetical protein FLJ14827 (FLJ14827), mRNA                               |
| NM_032845 | Homo sapiens hypothetical protein FLJ14816 (FLJ14816), mRNA                               |
| NM_032835 | Homo sapiens hypothetical protein FLJ14761 (FLJ14761), mRNA                               |
| NM_032824 | Homo sapiens hypothetical protein FLJ14681 (FLJ14681), mRNA                               |
| NM_032823 | Homo sapiens hypothetical protein FLJ14675 (FLJ14675), mRNA                               |
| NM_032822 | Homo sapiens hypothetical protein FLJ14668 (FLJ14668), mRNA                               |
| NM_032818 | Homo sapiens hypothetical protein FLJ14642 (FLJ14642), mRNA                               |
| NM_032804 | Homo sapiens hypothetical protein FLJ14547 (FLJ14547), mRNA                               |
| NM_032795 | Homo sapiens hypothetical protein FLJ14494 (FLJ14494), mRNA                               |
| NM_032783 | Homo sapiens hypothetical protein FLJ14431 (FLJ14431), mRNA                               |
| NM_032766 | Homo sapiens hypothetical protein MGC16179 (MGC16179), mRNA                               |
| NM_032763 | Homo sapiens hypothetical protein MGC16142 (MGC16142), mRNA                               |
| NM_032756 | Homo sapiens hypothetical protein MGC15668 (MGC15668), mRNA                               |
| NM_032744 | Homo sapiens hypothetical protein MGC12335 (MGC12335), mRNA                               |
| NM_032738 | Homo sapiens hypothetical protein MGC4595 (MGC4595), mRNA                                 |
| NM_032723 | Homo sapiens hypothetical protein MGC12760 (MGC12760), mRNA                               |
| NM_032720 | Homo sapiens hypothetical protein MGC10724 (MGC10724), mRNA                               |
| NM_032715 | Homo sapiens hypothetical protein MGC4643 (MGC4643), mRNA                                 |
| NM_032712 | Homo sapiens hypothetical protein MGC13170 (MGC13170), mRNA                               |
| NM_032711 | Homo sapiens hypothetical protein MGC13090 (MGC13090), mRNA                               |
| NM_032706 | Homo sapiens hypothetical protein MGC12966 (MGC12966), mRNA                               |
| NM_032705 | Homo sapiens hypothetical protein MGC14801 (MGC14801), mRNA                               |
| NM_032694 | Homo sapiens hypothetical protein MGC12935 (MGC12935), mRNA                               |
| NM_032693 | Homo sapiens hypothetical protein MGC10646 (MGC10646), mRNA                               |
| NM_032681 | Homo sapiens hypothetical protein MGC10977 (MGC10977), mRNA                               |
| NM_032678 | Homo sapiens hypothetical protein MGC3413 (MGC3413), mRNA                                 |
| NM_032667 | Homo sapiens hypothetical protein MGC4694 (MGC4694), mRNA                                 |
| NM_032661 | Homo sapiens hypothetical protein MGC5139 (MGC5139), mRNA                                 |
| NM_032634 | Homo sapiens hypothetical protein MGC3079 (MGC3079), mRNA                                 |



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| NM_032631 | Homo sapiens hypothetical protein MGC2641 (MGC2641), mRNA                    |
| NM_032601 | Homo sapiens methylmalonyl CoA epimerase (MCEE), mRNA                        |
| NM_032596 | Homo sapiens testes development-related NYD-SP22 (NYD-SP22), mRNA            |
| NM_032593 | Homo sapiens PKCI-I-related HIT protein (HIT-17), mRNA                       |
| NM_032586 | Homo sapiens testis transcript Y 8 (TTY8), mRNA                              |
| NM_032582 | Homo sapiens ubiquitin specific protease (NY-REN-60), mRNA                   |
| NM_032580 | Homo sapiens hairy and enhancer of split 7 (Drosophila) (HES7), mRNA         |
| NM_032574 | Homo sapiens dpy-30-like protein (LOC84661), mRNA                            |
| NM_032558 | Homo sapiens hypothetical protein FLJ14753 (FLJ14753), mRNA                  |
| NM_032557 | Homo sapiens HP43.8KD protein (HP43.8KD), mRNA                               |
| NM_032553 | Homo sapiens putative purinergic receptor (FKSG79), mRNA                     |
| NM_032545 | Homo sapiens cryptic gene (CRYPTIC), mRNA                                    |
| NM_020963 | Homo sapiens Mov10, Moloney leukemia virus 10, homolog (mouse) (MOV10), mRNA |
| NM_032522 | Homo sapiens hypothetical protein MGC2629 (MGC2629), mRNA                    |
| NM_032507 | Homo sapiens cerebral protein-4 (HUCEP-4), mRNA                              |
| NM_032499 | Homo sapiens hypothetical protein HH114 (HH114), mRNA                        |
| NM_032494 | Homo sapiens zinc finger protein (LOC84524), mRNA                            |
| NM_032492 | Homo sapiens hypothetical protein GL009 (GL009), mRNA                        |
| NM_032487 | Homo sapiens actin related protein M1 (ARPM1), mRNA                          |
| NM_032486 | Homo sapiens dynactin 4 (MGC3248), mRNA                                      |
| NM_032445 | Homo sapiens MEGF11 protein (MEGF11), mRNA                                   |
| NM_030898 | Homo sapiens hypothetical protein FLJ21673 (FLJ21673), mRNA                  |
| NM_032412 | Homo sapiens putative nuclear protein ORF1-FL49 (ORF1-FL49), mRNA            |
| NM_032411 | Homo sapiens esophageal cancer related gene 4 protein (ECRG4), mRNA          |
| NM_015247 | Homo sapiens cylindromatosis (turban tumor syndrome) (CYLD), mRNA            |
| NM_032330 | Homo sapiens hypothetical protein MGC12536 (MGC12536), mRNA                  |
| NM_032384 | Homo sapiens hypothetical protein FLJ23183 (FLJ23183), mRNA                  |
| NM_032372 | Homo sapiens hypothetical protein MGC16186 (MGC16186), mRNA                  |
| NM_032367 | Homo sapiens hypothetical protein MGC15435 (MGC15435), mRNA                  |
| NM_032354 | Homo sapiens hypothetical protein MGC10744 (MGC10744), mRNA                  |
| NM_032347 | Homo sapiens hypothetical protein MGC13250 (MGC13250), mRNA                  |
| NM_032344 | Homo sapiens hypothetical protein MGC13045 (MGC13045), mRNA                  |
| NM_032342 | Homo sapiens hypothetical protein MGC12992 (MGC12992), mRNA                  |
| NM_032340 | Homo sapiens hypothetical protein MGC14833 (MGC14833), mRNA                  |
| NM_032338 | Homo sapiens hypothetical protein MGC14817 (MGC14817), mRNA                  |
| NM_032333 | Homo sapiens hypothetical protein MGC4248 (MGC4248), mRNA                    |
| NM_032327 | Homo sapiens hypothetical protein MGC2993 (MGC2993), mRNA                    |
| NM_032325 | Homo sapiens hypothetical protein MGC11102 (MGC11102), mRNA                  |
| NM_032324 | Homo sapiens hypothetical protein MGC13186 (MGC13186), mRNA                  |
| NM_032323 | Homo sapiens hypothetical protein MGC13102 (MGC13102), mRNA                  |
| NM_032320 | Homo sapiens hypothetical protein MGC13007 (MGC13007), mRNA                  |
| NM_032318 | Homo sapiens hypothetical protein MGC12945 (MGC12945), mRNA                  |
| NM_032317 | Homo sapiens hypothetical protein MGC12943 (MGC12943), mRNA                  |
| NM_032316 | Homo sapiens hypothetical protein MGC12936 (MGC12936), mRNA                  |
| NM_032305 | Homo sapiens hypothetical protein MGC3200 (MGC3200), mRNA                    |
| NM_032293 | Homo sapiens hypothetical protein DKFZp761J1523 (DKFZp761J1523), mRNA        |
| NM_032291 | Homo sapiens hypothetical protein DKFZp761D221 (DKFZp761D221), mRNA          |
| NM_032290 | Homo sapiens hypothetical protein DKFZp761C121 (DKFZp761C121), mRNA          |
| NM_032288 | Homo sapiens hypothetical protein DKFZp761B1514 (DKFZp761B1514), mRNA        |
| NM_032273 | Homo sapiens hypothetical protein DKFZp586C1924 (DKFZp586C1924), mRNA        |

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|           | mRNA  |
| NM_032299 | Homo sapiens hypothetical protein MGC2714 (MGC2714), mRNA             |
| NM_032267 | Homo sapiens hypothetical protein DKFZp434E169 (DKFZp434E169), mRNA   |
| NM_032264 | Homo sapiens hypothetical protein DKFZp434D177 (DKFZp434D177), mRNA   |
| NM_032261 | Homo sapiens hypothetical protein DKFZp434N0650 (DKFZp434N0650), mRNA |
| NM_032258 | Homo sapiens hypothetical protein DKFZp434P2235 (DKFZp434P2235), mRNA |
| NM_032251 | Homo sapiens hypothetical protein DKFZp434G0920 (DKFZp434G0920), mRNA |
| NM_032250 | Homo sapiens hypothetical protein DKFZp434A171 (DKFZp434A171), mRNA   |
| NM_032249 | Homo sapiens hypothetical protein DKFZp434F1819 (DKFZp434F1819), mRNA |
| NM_032248 | Homo sapiens hypothetical protein DKFZp434F1719 (DKFZp434F1719), mRNA |
| NM_032246 | Homo sapiens hypothetical protein DKFZp434J0617 (DKFZp434J0617), mRNA |
| NM_032245 | Homo sapiens hypothetical protein DKFZp434I1916 (DKFZp434I1916), mRNA |
| NM_032223 | Homo sapiens hypothetical protein FLJ22427 (FLJ22427), mRNA           |
| NM_032209 | Homo sapiens hypothetical protein FLJ21777 (FLJ21777), mRNA           |
| NM_032193 | Homo sapiens hypothetical protein FLJ20974 (FLJ20974), mRNA           |
| NM_032177 | Homo sapiens hypothetical protein FLJ13193 (FLJ13193), mRNA           |
| NM_032167 | Homo sapiens hypothetical protein FLJ12363 (FLJ12363), mRNA           |
| NM_032161 | Homo sapiens KIAA1870 protein (KIAA1870), mRNA                        |
| NM_032154 | Homo sapiens MBLR protein (MBLR), mRNA                                |
| NM_032151 | Homo sapiens hypothetical protein DKFZp566K1946 (DKFZp566K1946), mRNA |
| NM_032148 | Homo sapiens hypothetical protein DKFZp434K0427 (DKFZp434K0427), mRNA |
| NM_032139 | Homo sapiens hypothetical protein DKFZp434L0718 (DKFZp434L0718), mRNA |
| NM_032138 | Homo sapiens hypothetical protein DKFZp434E2318 (DKFZp434E2318), mRNA |
| NM_032136 | Homo sapiens hypothetical protein DKFZp434L1717 (DKFZp434L1717), mRNA |
| NM_032125 | Homo sapiens hypothetical protein DKFZp564D0478 (DKFZp564D0478), mRNA |
| NM_032120 | Homo sapiens hypothetical protein DKFZp564O0523 (DKFZp564O0523), mRNA |
| NM_020921 | Homo sapiens ninein (GSK3B interacting protein) (NIN), mRNA           |
| NM_020441 | Homo sapiens hypothetical protein DKFZp762I166 (DKFZp762I166), mRNA   |
| NM_018719 | Homo sapiens hypothetical protein DKFZp762L0311 (DKFZp762L0311), mRNA |
| NM_015630 | Homo sapiens DKFZP566F2124 protein (DKFZP566F2124), mRNA              |
| NM_015621 | Homo sapiens DKFZP434C171 protein (DKFZP434C171), mRNA                |
| NM_015595 | Homo sapiens DKFZP434D146 protein (DKFZP434D146), mRNA                |
| NM_015496 | Homo sapiens DKFZP434I116 protein (DKFZP434I116), mRNA                |
| NM_015471 | Homo sapiens DKFZP566O1646 protein (DC8), mRNA                        |
| NM_015453 | Homo sapiens DKFZP434F091 protein (DKFZP434F091), mRNA                |
| NM_015023 | Homo sapiens KIAA1037 protein (KIAA1037), mRNA                        |
| NM_014972 | Homo sapiens KIAA1049 protein (KIAA1049), mRNA                        |
| NM_032042 | Homo sapiens hypothetical protein DKFZp564D172 (DKFZp564D172), mRNA   |
| NM_032036 | Homo sapiens TLH29 protein precursor (TLH29), mRNA                    |

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| NM_032030 | Homo sapiens FKSG83 (FKSG83), mRNA  |
| NM_032028 | Homo sapiens serine/threonine kinase FKSG81 (FKSG81), mRNA                      |
| NM_032025 | Homo sapiens CDA02 protein (CDA02), mRNA  |
| NM_032021 | Homo sapiens AD031 protein (AD031), mRNA  |
| NM_031944 | Homo sapiens Mix-like homeobox protein 1 (MILD1), mRNA                          |
| NM_031920 | Homo sapiens ARG99 protein (ARG99), mRNA  |
| NM_031480 | Homo sapiens hypothetical protein AD034 (AD034), mRNA                           |
| NM_031478 | Homo sapiens hypothetical protein DKFZp434I2117 (DKFZP434I2117), mRNA           |
| NM_031477 | Homo sapiens hypothetical protein MGC10500 (MGC10500), mRNA                     |
| NM_031476 | Homo sapiens hypothetical protein DKFZp434B044 (DKFZP434B044), mRNA             |
| NM_031472 | Homo sapiens hypothetical protein MGC11134 (MGC11134), mRNA                     |
| NM_031471 | Homo sapiens hypothetical protein MGC10966 (MGC10966), mRNA                     |
| NM_031457 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 8B (MS4A8B), mRNA |
| NM_031450 | Homo sapiens hypothetical protein p5326 (P5326), mRNA                           |
| NM_031443 | Homo sapiens hypothetical protein MGC4607 (MGC4607), mRNA                       |
| NM_031438 | Homo sapiens hypothetical protein DKFZp761I172 (DKFZP761I172), mRNA             |
| NM_031434 | Homo sapiens hypothetical protein MGC5442 (MGC5442), mRNA                       |
| NM_031418 | Homo sapiens chromosome 11 open reading frame 25 (C11orf25), mRNA               |
| NM_015497 | Homo sapiens DKFZP564G2022 protein (DKFZP564G2022), mRNA                        |
| NM_031306 | Homo sapiens hypothetical protein DKFZp564B1023 (DKFZP564B1023), mRNA           |
| NM_031295 | Homo sapiens hypothetical protein PP1226 (PP1226), mRNA                         |
| NM_031291 | Homo sapiens hypothetical protein DKFZp434N1235 (DKFZP434N1235), mRNA           |
| NM_031290 | Homo sapiens hypothetical protein DKFZp434K1172 (DKFZP434K1172), mRNA           |
| NM_031270 | Homo sapiens PRO1596 protein (PRO1596), mRNA                                    |
| NM_031268 | Homo sapiens PRO0461 protein (PRO0461), mRNA                                    |
| NM_031217 | Homo sapiens hypothetical protein DKFZp434G2226 (DKFZP434G2226), mRNA           |
| NM_013358 | Homo sapiens peptidylarginine deiminase type I (hPAD-colony10), mRNA            |
| NM_030980 | Homo sapiens hypothetical protein FLJ12671 (FLJ12671), mRNA                     |
| NM_030954 | Homo sapiens hypothetical protein DKFZp564A022 (DKFZP564A022), mRNA             |
| NM_030953 | Homo sapiens hypothetical protein DKFZp761E2110 (DKFZP761E2110), mRNA           |
| NM_030941 | Homo sapiens exonuclease NEF-sp (LOC81691), mRNA                                |
| NM_030939 | Homo sapiens hypothetical protein FLJ12619 (FLJ12619), mRNA                     |
| NM_030938 | Homo sapiens likely ortholog of rat vacuole membrane protein 1 (VMP1), mRNA     |
| NM_030932 | Homo sapiens diaphanous homolog 3 (Drosophila) (DIAPH3), mRNA                   |
| NM_030927 | Homo sapiens hypothetical protein MGC11352 (MGC11352), mRNA                     |
| NM_030925 | Homo sapiens hypothetical protein FLJ12577 (FLJ12577), mRNA                     |
| NM_030918 | Homo sapiens hypothetical protein My014 (MY014), mRNA                           |
| NM_030911 | Homo sapiens protein kinase NYD-SP15 (NYD-SP15), mRNA                           |
| NM_030899 | Homo sapiens hypothetical protein FLJ23407 (FLJ23407), mRNA                     |
| NM_018657 | Homo sapiens myoneurin (MYNN), mRNA   |
| NM_030818 | Homo sapiens hypothetical protein MGC10471 (MGC10471), mRNA                     |
| NM_030813 | Homo sapiens suppressor of potassium transport defect 3 (SKD3), mRNA            |
| NM_030808 | Homo sapiens LIS1-interacting protein NUDEL; endooligopeptidase A (NUDEL), mRNA |
| NM_030805 | Homo sapiens hypothetical protein DKFZp564L2423 (DKFZP564L2423), mRNA           |

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|           | mRNA   |
| NM_030802 | Homo sapiens C/EBP-induced protein (LOC81558), mRNA                              |
| NM_030800 | Homo sapiens hypothetical protein DKFZp564O1664 (DKFZp564O1664), mRNA            |
| NM_030799 | Homo sapiens hypothetical protein AF140225 (AF140225), mRNA                      |
| NM_030793 | Homo sapiens hypothetical protein SP329 (SP329), mRNA                            |
| NM_030792 | Homo sapiens hypothetical protein PP1665 (PP1665), mRNA                          |
| NM_030780 | Homo sapiens folate transporter/carrier (LOC81034), mRNA                         |
| NM_030674 | Homo sapiens solute carrier family 38, member 1 (SLC38A1), mRNA                  |
| NM_030672 | Homo sapiens hypothetical protein FLJ10312 (FLJ10312), mRNA                      |
| NM_024947 | Homo sapiens hypothetical protein FLJ12729 (FLJ12729), mRNA                      |
| NM_024963 | Homo sapiens hypothetical protein FLJ11467 (FLJ11467), mRNA                      |
| NM_017600 | Homo sapiens hypothetical protein DKFZp434M0331 (DKFZp434M0331), mRNA            |
| NM_030652 | Homo sapiens NG3 protein (NG3), mRNA   |
| NM_030651 | Homo sapiens chromosome 6 open reading frame 31 (C6orf31), mRNA                  |
| NM_020444 | Homo sapiens KIAA1191 protein (KIAA1191), mRNA                                   |
| NM_024055 | Homo sapiens hypothetical protein MGC5499 (MGC5499), mRNA                        |
| NM_025154 | Homo sapiens KIAA0810 protein (KIAA0810), mRNA                                   |
| NM_017515 | Homo sapiens novel protein (HSNOV1), mRNA  |
| NM_024924 | Homo sapiens hypothetical protein FLJ12985 (FLJ12985), mRNA                      |
| NM_030579 | Homo sapiens cytochrome b5 outer mitochondrial membrane precursor (CYB5-M), mRNA |
| NM_022068 | Homo sapiens hypothetical protein FLJ23403 (FLJ23403), mRNA                      |
| NM_025179 | Homo sapiens plexin A2 (PLXNA2), mRNA  |
| NM_014033 | Homo sapiens DKFZP586A0522 protein (DKFZP586A0522), mRNA                         |
| NM_006468 | Homo sapiens polymerase (RNA) III (DNA directed) (62kD) (RPC62), mRNA            |
| NM_025263 | Homo sapiens CAT56 protein (CAT56), mRNA   |
| NM_025262 | Homo sapiens G5C protein (G5C), mRNA   |
| NM_025261 | Homo sapiens G6C protein (G6C), mRNA   |
| NM_025260 | Homo sapiens G6B protein (G6B), mRNA   |
| NM_025259 | Homo sapiens NG23 protein (NG23), mRNA   |
| NM_025258 | Homo sapiens NG37 protein (G7C), mRNA  |
| NM_025231 | Homo sapiens hypothetical protein FLJ22191 (FLJ22191), mRNA                      |
| NM_025226 | Homo sapiens MSTP032 protein (MSTP032), mRNA                                     |
| NM_025211 | Homo sapiens protein kinase anchoring protein GKAP42 (GKAP42), mRNA              |
| NM_025201 | Homo sapiens hypothetical protein PP1628 (PP1628), mRNA                          |
| NM_025192 | Homo sapiens hypothetical protein FLJ23071 (FLJ23071), mRNA                      |
| NM_025188 | Homo sapiens hypothetical protein FLJ13181 (FLJ13181), mRNA                      |
| NM_025174 | Homo sapiens hypothetical protein FLJ23040 (FLJ23040), mRNA                      |
| NM_025165 | Homo sapiens hypothetical protein FLJ22637 (FLJ22637), mRNA                      |
| NM_025160 | Homo sapiens hypothetical protein FLJ21016 (FLJ21016), mRNA                      |
| NM_025153 | Homo sapiens hypothetical protein FLJ21477 (FLJ21477), mRNA                      |
| NM_025151 | Homo sapiens hypothetical protein FLJ22622 (FLJ22622), mRNA                      |
| NM_025149 | Homo sapiens hypothetical protein FLJ20920 (FLJ20920), mRNA                      |
| NM_025144 | Homo sapiens hypothetical protein FLJ22670 (FLJ22670), mRNA                      |
| NM_025138 | Homo sapiens hypothetical protein FLJ12661 (FLJ12661), mRNA                      |
| NM_025126 | Homo sapiens ring finger protein 34 (RNF34), mRNA                                |
| NM_025125 | Homo sapiens hypothetical protein FLJ13263 (FLJ13263), mRNA                      |
| NM_025124 | Homo sapiens hypothetical protein FLJ21749 (FLJ21749), mRNA                      |
| NM_025109 | Homo sapiens hypothetical protein FLJ22865 (FLJ22865), mRNA                      |
| NM_025099 | Homo sapiens hypothetical protein FLJ22170 (FLJ22170), mRNA                      |

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| NM 025098 | Homo sapiens hypothetical protein FLJ22644 (FLJ22644), mRNA       |
| NM 025097 | Homo sapiens hypothetical protein FLJ21106 (FLJ21106), mRNA       |
| NM 025095 | Homo sapiens hypothetical protein FLJ23558 (FLJ23558), mRNA       |
| NM 025086 | Homo sapiens hypothetical protein FLJ22596 (FLJ22596), mRNA       |
| NM 025080 | Homo sapiens hypothetical protein FLJ22316 (FLJ22316), mRNA       |
| NM 025079 | Homo sapiens hypothetical protein FLJ23231 (FLJ23231), mRNA       |
| NM 025077 | Homo sapiens hypothetical protein FLJ13949 (FLJ13949), mRNA       |
| NM 025076 | Homo sapiens hypothetical protein FLJ23591 (FLJ23591), mRNA       |
| NM 025072 | Homo sapiens chromosome 9 open reading frame 15 (C9orf15), mRNA   |
| NM 025070 | Homo sapiens hypothetical protein FLJ22242 (FLJ22242), mRNA       |
| NM 025058 | Homo sapiens hypothetical protein FLJ23229 (FLJ23229), mRNA       |
| NM 025055 | Homo sapiens hypothetical protein FLJ23168 (FLJ23168), mRNA       |
| NM 025044 | Homo sapiens hypothetical protein FLJ22476 (FLJ22476), mRNA       |
| NM 025043 | Homo sapiens hypothetical protein FLJ22404 (FLJ22404), mRNA       |
| NM 025041 | Homo sapiens hypothetical protein FLJ22173 (FLJ22173), mRNA       |
| NM 025034 | Homo sapiens hypothetical protein FLJ21290 (FLJ21290), mRNA       |
| NM 025032 | Homo sapiens hypothetical protein FLJ21272 (FLJ21272), mRNA       |
| NM 025029 | Homo sapiens hypothetical protein FLJ14346 (FLJ14346), mRNA       |
| NM 025005 | Homo sapiens hypothetical protein FLJ13315 (FLJ13315), mRNA       |
| NM 024998 | Homo sapiens hypothetical protein FLJ12704 (FLJ12704), mRNA       |
| NM 024994 | Homo sapiens hypothetical protein FLJ12595 (FLJ12595), mRNA       |
| NM 024977 | Homo sapiens hypothetical protein FLJ12078 (FLJ12078), mRNA       |
| NM 024976 | Homo sapiens hypothetical protein FLJ11996 (FLJ11996), mRNA       |
| NM 024956 | Homo sapiens hypothetical protein FLJ23375 (FLJ23375), mRNA       |
| NM 024944 | Homo sapiens chromosome 21 open reading frame 68 (C21orf68), mRNA |
| NM 024942 | Homo sapiens hypothetical protein FLJ13490 (FLJ13490), mRNA       |
| NM 024941 | Homo sapiens hypothetical protein FLJ13611 (FLJ13611), mRNA       |
| NM 024938 | Homo sapiens hypothetical protein FLJ11383 (FLJ11383), mRNA       |
| NM 024935 | Homo sapiens hypothetical protein FLJ13687 (FLJ13687), mRNA       |
| NM 024920 | Homo sapiens hypothetical protein FLJ14281 (FLJ14281), mRNA       |
| NM 024919 | Homo sapiens hypothetical protein FLJ22615 (FLJ22615), mRNA       |
| NM 024917 | Homo sapiens hypothetical protein FLJ12687 (FLJ12687), mRNA       |
| NM 024914 | Homo sapiens hypothetical protein FLJ13262 (FLJ13262), mRNA       |
| NM 024911 | Homo sapiens hypothetical protein FLJ23091 (FLJ23091), mRNA       |
| NM 024909 | Homo sapiens hypothetical protein FLJ13158 (FLJ13158), mRNA       |
| NM 024908 | Homo sapiens hypothetical protein FLJ12973 (FLJ12973), mRNA       |
| NM 024906 | Homo sapiens hypothetical protein FLJ21032 (FLJ21032), mRNA       |
| NM 024897 | Homo sapiens hypothetical protein FLJ22672 (FLJ22672), mRNA       |
| NM 024889 | Homo sapiens hypothetical protein FLJ23537 (FLJ23537), mRNA       |
| NM 024886 | Homo sapiens hypothetical protein FLJ14280 (FLJ14280), mRNA       |
| NM 024882 | Homo sapiens hypothetical protein FLJ13189 (FLJ13189), mRNA       |
| NM 024880 | Homo sapiens hypothetical protein FLJ23556 (FLJ23556), mRNA       |
| NM 024864 | Homo sapiens hypothetical protein FLJ22578 (FLJ22578), mRNA       |
| NM 024853 | Homo sapiens hypothetical protein FLJ13385 (FLJ13385), mRNA       |
| NM 024848 | Homo sapiens hypothetical protein FLJ13941 (FLJ13941), mRNA       |
| NM 024847 | Homo sapiens hypothetical protein FLJ21240 (FLJ21240), mRNA       |
| NM 024841 | Homo sapiens hypothetical protein FLJ14213 (FLJ14213), mRNA       |
| NM 024839 | Homo sapiens hypothetical protein FLJ22638 (FLJ22638), mRNA       |
| NM 024837 | Homo sapiens hypothetical protein FLJ21472 (FLJ21472), mRNA       |
| NM 024835 | Homo sapiens C3HC4-type zinc finger protein (LZK1), mRNA          |
| NM 024815 | Homo sapiens hypothetical protein FLJ22494 (FLJ22494), mRNA       |

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| NM_024813 | Homo sapiens hypothetical protein FLJ13150 (FLJ13150), mRNA   |
| NM_024811 | Homo sapiens hypothetical protein FLJ12529 (FLJ12529), mRNA   |
| NM_024810 | Homo sapiens hypothetical protein FLJ23018 (FLJ23018), mRNA   |
| NM_024809 | Homo sapiens hypothetical protein FLJ12975 (FLJ12975), mRNA   |
| NM_024808 | Homo sapiens hypothetical protein FLJ22624 (FLJ22624), mRNA   |
| NM_024807 | Homo sapiens hypothetical protein FLJ13693 (FLJ13693), mRNA   |
| NM_024806 | Homo sapiens hypothetical protein FLJ23554 (FLJ23554), mRNA   |
| NM_024799 | Homo sapiens hypothetical protein FLJ13224 (FLJ13224), mRNA   |
| NM_024796 | Homo sapiens hypothetical protein FLJ22639 (FLJ22639), mRNA   |
| NM_024789 | Homo sapiens hypothetical protein FLJ22529 (FLJ22529), mRNA   |
| NM_024784 | Homo sapiens hypothetical protein FLJ23392 (FLJ23392), mRNA   |
| NM_024780 | Homo sapiens hypothetical protein FLJ13593 (FLJ13593), mRNA   |
| NM_024773 | Homo sapiens hypothetical protein FLJ13798 (FLJ13798), mRNA   |
| NM_024772 | Homo sapiens hypothetical protein FLJ23151 (FLJ23151), mRNA   |
| NM_024771 | Homo sapiens hypothetical protein FLJ13848 (FLJ13848), mRNA   |
| NM_024763 | Homo sapiens hypothetical protein FLJ23129 (FLJ23129), mRNA   |
| NM_024754 | Homo sapiens hypothetical protein FLJ12598 (FLJ12598), mRNA   |
| NM_024749 | Homo sapiens hypothetical protein FLJ12505 (FLJ12505), mRNA   |
| NM_024746 | Homo sapiens hypothetical protein FLJ13840 (FLJ13840), mRNA   |
| NM_024732 | Homo sapiens hypothetical protein FLJ14351 (FLJ14351), mRNA   |
| NM_024731 | Homo sapiens chromosome 16 open reading frame 44 (C16orf44), mRNA   |
| NM_024727 | Homo sapiens hypothetical protein FLJ23259 (FLJ23259), mRNA   |
| NM_024722 | Homo sapiens hypothetical protein FLJ13322 (FLJ13322), mRNA   |
| NM_024717 | Homo sapiens hypothetical protein FLJ22344 (FLJ22344), mRNA   |
| NM_024715 | Homo sapiens hypothetical protein FLJ22625 (FLJ22625), mRNA   |
| NM_024709 | Homo sapiens hypothetical protein FLJ14146 (FLJ14146), mRNA   |
| NM_024705 | Homo sapiens hypothetical protein FLJ13639 (FLJ13639), mRNA   |
| NM_024703 | Homo sapiens hypothetical protein FLJ22593 (FLJ22593), mRNA   |
| NM_024701 | Homo sapiens ankyrin repeat and SOCS box-containing 13 (ASB13), mRNA  |
| NM_024700 | Homo sapiens Smad nuclear interacting protein (SNIP1), mRNA   |
| NM_024695 | Homo sapiens hypothetical protein FLJ13993 (FLJ13993), mRNA   |
| NM_024693 | Homo sapiens hypothetical protein FLJ20909 (FLJ20909), mRNA   |
| NM_024688 | Homo sapiens hypothetical protein FLJ13031 (FLJ13031), mRNA   |
| NM_024686 | Homo sapiens hypothetical protein FLJ23033 (FLJ23033), mRNA   |
| NM_024678 | Homo sapiens hypothetical protein FLJ23441 (FLJ23441), mRNA   |
| NM_024675 | Homo sapiens hypothetical protein FLJ21816 (FLJ21816), mRNA   |
| NM_024672 | Homo sapiens hypothetical protein FLJ23320 (FLJ23320), mRNA   |
| NM_024666 | Homo sapiens hypothetical protein FLJ11506 (FLJ11506), mRNA   |
| NM_024654 | Homo sapiens hypothetical protein FLJ23323 (FLJ23323), mRNA   |
| NM_024650 | Homo sapiens hypothetical protein FLJ22531 (FLJ22531), mRNA   |
| NM_024649 | Homo sapiens hypothetical protein FLJ23590 (FLJ23590), mRNA   |
| NM_024647 | Homo sapiens hypothetical protein FLJ13287 (FLJ13287), mRNA   |
| NM_024640 | Homo sapiens hypothetical protein FLJ23476 (FLJ23476), mRNA   |
| NM_024636 | Homo sapiens likely ortholog of mouse tumor necrosis-alpha-induced adipose-related protein (FLJ23153), mRNA |
| NM_024628 | Homo sapiens hypothetical protein FLJ23188 (FLJ23188), mRNA   |
| NM_024627 | Homo sapiens hypothetical protein FLJ21125 (FLJ21125), mRNA   |
| NM_024626 | Homo sapiens hypothetical protein FLJ22418 (FLJ22418), mRNA   |
| NM_024624 | Homo sapiens hypothetical protein FLJ22116 (FLJ22116), mRNA   |
| NM_024616 | Homo sapiens hypothetical protein FLJ23186 (FLJ23186), mRNA   |
| NM_024615 | Homo sapiens hypothetical protein FLJ21308 (FLJ21308), mRNA   |

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| NM_024613 | Homo sapiens phafin 2 (FLJ13187), mRNA                          |
| NM_024610 | Homo sapiens hypothetical protein FLJ22623 (FLJ22623), mRNA     |
| NM_024609 | Homo sapiens hypothetical protein FLJ21841 (FLJ21841), mRNA     |
| NM_024606 | Homo sapiens hypothetical protein FLJ11756 (FLJ11756), mRNA     |
| NM_024605 | Homo sapiens hypothetical protein FLJ20896 (FLJ20896), mRNA     |
| NM_024602 | Homo sapiens hypothetical protein FLJ21156 (FLJ21156), mRNA     |
| NM_024595 | Homo sapiens hypothetical protein FLJ12666 (FLJ12666), mRNA     |
| NM_024585 | Homo sapiens hypothetical protein FLJ22160 (FLJ22160), mRNA     |
| NM_024584 | Homo sapiens hypothetical protein FLJ13646 (FLJ13646), mRNA     |
| NM_024580 | Homo sapiens hypothetical protein FLJ13119 (FLJ13119), mRNA     |
| NM_024570 | Homo sapiens hypothetical protein FLJ11712 (FLJ11712), mRNA     |
| NM_024565 | Homo sapiens hypothetical protein FLJ14166 (FLJ14166), mRNA     |
| NM_024556 | Homo sapiens hypothetical protein FLJ21103 (FLJ21103), mRNA     |
| NM_024552 | Homo sapiens hypothetical protein FLJ12089 (FLJ12089), mRNA     |
| NM_024546 | Homo sapiens hypothetical protein FLJ13449 (FLJ13449), mRNA     |
| NM_024534 | Homo sapiens hypothetical protein FLJ12684 (FLJ12684), mRNA     |
| NM_024532 | Homo sapiens hypothetical protein FLJ22724 (FLJ22724), mRNA     |
| NM_024526 | Homo sapiens hypothetical protein FLJ21522 (FLJ21522), mRNA     |
| NM_024523 | Homo sapiens hypothetical protein FLJ22035 (FLJ22035), mRNA     |
| NM_024522 | Homo sapiens hypothetical protein FLJ12650 (FLJ12650), mRNA     |
| NM_024516 | Homo sapiens hypothetical protein MGC4606 (MGC4606), mRNA       |
| NM_024514 | Homo sapiens hypothetical protein MGC4663 (MGC4663), mRNA       |
| NM_024507 | Homo sapiens hypothetical protein MGC10791 (MGC10791), mRNA     |
| NM_015288 | Homo sapiens KIAA0239 protein (KIAA0239), mRNA                  |
| NM_024419 | Homo sapiens Phosphatidylglycerophosphate Synthase (PGS1), mRNA |
| NM_024345 | Homo sapiens hypothetical protein MGC10765 (MGC10765), mRNA     |
| NM_024340 | Homo sapiens hypothetical protein MGC4179 (MGC4179), mRNA       |
| NM_024330 | Homo sapiens hypothetical protein MGC4365 (MGC4365), mRNA       |
| NM_024326 | Homo sapiens hypothetical protein MGC11279 (MGC11279), mRNA     |
| NM_024321 | Homo sapiens hypothetical protein MGC10433 (MGC10433), mRNA     |
| NM_024312 | Homo sapiens hypothetical protein MGC4170 (MGC4170), mRNA       |
| NM_024308 | Homo sapiens hypothetical protein MGC4172 (MGC4172), mRNA       |
| NM_024307 | Homo sapiens hypothetical protein MGC4171 (MGC4171), mRNA       |
| NM_024295 | Homo sapiens hypothetical protein MGC3067 (MGC3067), mRNA       |
| NM_020062 | Homo sapiens SLC2A4 regulator (SLC2A4RG), mRNA                  |
| NM_018491 | Homo sapiens COBW-like protein (LOC55871), mRNA                 |
| NM_024116 | Homo sapiens hypothetical protein MGC5306 (MGC5306), mRNA       |
| NM_024114 | Homo sapiens hypothetical protein MGC4827 (MGC4827), mRNA       |
| NM_024113 | Homo sapiens hypothetical protein MGC4707 (MGC4707), mRNA       |
| NM_024099 | Homo sapiens hypothetical protein MGC2477 (MGC2477), mRNA       |
| NM_024092 | Homo sapiens hypothetical protein MGC5508 (MGC5508), mRNA       |
| NM_024084 | Homo sapiens hypothetical protein MGC3196 (MGC3196), mRNA       |
| NM_024072 | Homo sapiens hypothetical protein MGC2835 (MGC2835), mRNA       |
| NM_024067 | Homo sapiens hypothetical protein MGC2718 (MGC2718), mRNA       |
| NM_024063 | Homo sapiens hypothetical protein MGC5347 (MGC5347), mRNA       |
| NM_024040 | Homo sapiens hypothetical protein MGC2491 (MGC2491), mRNA       |
| NM_024036 | Homo sapiens hypothetical protein MGC3103 (MGC3103), mRNA       |
| NM_015450 | Homo sapiens protection of telomeres 1 (POT1), mRNA             |
| NM_021249 | Homo sapiens sorting nexin 6 (SNX6), mRNA                       |
| NM_023932 | Homo sapiens hypothetical protein MGC2487 (MGC2487), mRNA       |
| NM_023930 | Homo sapiens hypothetical protein MGC2376 (MGC2376), mRNA       |



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| NM_014045 | Homo sapiens DKFZP564C1940 protein (DKFZP564C1940), mRNA   |
| NM_015533 | Homo sapiens DKFZP586B1621 protein (DKFZP586B1621), mRNA   |
| NM_023927 | Homo sapiens hypothetical protein FLJ21313 (FLJ21313), mRNA  |
| NM_023923 | Homo sapiens hypothetical protein FLJ13171 (FLJ13171), mRNA  |
| NM_019054 | Homo sapiens hypothetical protein MGC5560 (MGC5560), mRNA  |
| NM_023070 | Homo sapiens hypothetical protein (LOC65243), mRNA   |
| NM_023015 | Homo sapiens hypothetical protein FLJ21919 (FLJ21919), mRNA  |
| NM_022899 | Homo sapiens likely ortholog of mouse actin-related protein 8 homolog (S. cerevisiae) (FLJ12934), mRNA         |
| NM_022836 | Homo sapiens DNA cross-link repair 1B (PSO2 homolog, S. cerevisiae) (DCLRE1B), mRNA                            |
| NM_022831 | Homo sapiens hypothetical protein FLJ12806 (FLJ12806), mRNA  |
| NM_022828 | Homo sapiens hypothetical protein FLJ21940 (FLJ21940), mRNA  |
| NM_022822 | Homo sapiens hypothetical protein FLJ12387 similar to kinesin light chain (FLJ12387), mRNA                     |
| NM_022784 | Homo sapiens hypothetical protein FLJ12476 (FLJ12476), mRNA  |
| NM_022783 | Homo sapiens hypothetical protein FLJ12428 (FLJ12428), mRNA  |
| NM_022774 | Homo sapiens hypothetical protein FLJ21144 (FLJ21144), mRNA  |
| NM_022765 | Homo sapiens hypothetical protein FLJ11937 (FLJ11937), mRNA  |
| NM_022764 | Homo sapiens hypothetical protein FLJ12998 (FLJ12998), mRNA  |
| NM_022758 | Homo sapiens hypothetical protein FLJ22195 (FLJ22195), mRNA  |
| NM_022753 | Homo sapiens hypothetical protein FLJ12903 (FLJ12903), mRNA  |
| NM_022749 | Homo sapiens retinoic acid induced 16 (RAI16), mRNA  |
| NM_022746 | Homo sapiens hypothetical protein FLJ22390 (FLJ22390), mRNA  |
| NM_022728 | Homo sapiens neurogenic differentiation 6 (NEUROD6), mRNA  |
| NM_022496 | Homo sapiens hypothetical protein FLJ13433 (FLJ13433), mRNA  |
| NM_022490 | Homo sapiens hypothetical protein FLJ13390 similar to PAF53 (FLJ13390), mRNA                                   |
| NM_022484 | Homo sapiens hypothetical protein FLJ13576 (FLJ13576), mRNA  |
| NM_022483 | Homo sapiens hypothetical protein FLJ21657 (FLJ21657), mRNA  |
| NM_022473 | Homo sapiens zinc finger protein 106 (ZFP106), mRNA  |
| NM_022471 | Homo sapiens hypothetical protein FLJ13057 similar to germ cell-less (FLJ13057), mRNA                          |
| NM_022463 | Homo sapiens nucleoredoxin 1 (NXN), mRNA   |
| NM_022462 | Homo sapiens hypothetical protein FLJ14033 similar to hypoxia inducible factor 3, alpha subunit (HIF-3A), mRNA |
| NM_022461 | Homo sapiens hypothetical protein FLJ21939 similar to 5-azacytidine induced gene 2 (FLJ21939), mRNA            |
| NM_022453 | Homo sapiens ring finger protein 25 (RNF25), mRNA  |
| NM_022374 | Homo sapiens likely ortholog of mouse ADP-ribosylation-like factor 6 interacting protein 2 (FLJ23293), mRNA    |
| NM_022371 | Homo sapiens ATP-dependant interferon responsive (ADIR), mRNA  |
| NM_022369 | Homo sapiens hypothetical protein FLJ12541 similar to Stra6 (FLJ12541), mRNA                                   |
| NM_022367 | Homo sapiens hypothetical protein FLJ12287 similar to semaphorins (FLJ12287), mRNA                             |
| NM_022359 | Homo sapiens similar to rat myomegalin (LOC64182), mRNA  |
| NM_022356 | Homo sapiens growth suppressor 1 (GROS1), mRNA   |
| NM_022354 | Homo sapiens spermatogenesis associated 1 (SPATA1), mRNA   |
| NM_022347 | Homo sapiens IFRG15 protein (IFRG15), mRNA   |
| NM_022341 | Homo sapiens peptide deformylase-like protein (LOC64146), mRNA   |
| NM_022164 | Homo sapiens P3ECSL (LIECG3), mRNA   |



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| NM_022147 | Homo sapiens 28kD interferon responsive protein (IFRG28), mRNA   |
| NM_022140 | Homo sapiens erythrocyte protein band 4.1-like 4 (EPB41L4), mRNA   |
| NM_022133 | Homo sapiens sorting nexin 16 (SNX16), mRNA  |
| NM_022126 | Homo sapiens phospholysine phosphohistidine inorganic pyrophosphate phosphatase (LHPP), mRNA                         |
| NM_022097 | Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC63928), mRNA  |
| NM_022094 | Homo sapiens hypothetical protein FLJ20871 similar to FSP27 (FLJ20871), mRNA   |
| NM_022090 | Homo sapiens transposon-derived Buster3 transposase-like (LOC63920), mRNA  |
| NM_022074 | Homo sapiens hypothetical protein FLJ22794 (FLJ22794), mRNA  |
| NM_022071 | Homo sapiens hypothetical protein FLJ20967 (FLJ20967), mRNA  |
| NM_022063 | Homo sapiens hypothetical protein FLJ13188 (FLJ13188), mRNA  |
| NM_022060 | Homo sapiens hypothetical protein FLJ12816 (FLJ12816), mRNA  |
| NM_022034 | Homo sapiens estrogen regulated gene 1 (ERG-1), mRNA   |
| NM_021945 | Homo sapiens hypothetical protein FLJ22174 (FLJ22174), mRNA  |
| NM_021944 | Homo sapiens hypothetical protein FLJ12154 (FLJ12154), mRNA  |
| NM_021941 | Homo sapiens hypothetical protein FLJ21324 (FLJ21324), mRNA  |
| NM_021928 | Homo sapiens hypothetical protein FLJ22649 similar to signal peptidase SPC22/23 (FLJ22649), mRNA                     |
| NM_021927 | Homo sapiens hypothetical protein FLJ13220 (FLJ13220), mRNA  |
| NM_021925 | Homo sapiens hypothetical protein FLJ21820 (FLJ21820), mRNA  |
| NM_021825 | Homo sapiens hypothetical protein MDS025 (MDS025), mRNA  |
| NM_015622 | Homo sapiens CGI-43 protein (LOC51622), mRNA   |
| NM_021639 | Homo sapiens hypothetical protein SPI92 (SPI92), mRNA  |
| NM_021637 | Homo sapiens hypothetical protein FLJ14084 (FLJ14084), mRNA  |
| NM_021614 | Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2 (KCNN2), mRNA |
| NM_021182 | Homo sapiens minor histocompatibility antigen HB-1 (HB-1), mRNA  |
| NM_021170 | Homo sapiens bHLH factor Hes4 (LOC57801), mRNA   |
| NM_021146 | Homo sapiens angiopoietin-like factor (CDT6), mRNA   |
| NM_005146 | Homo sapiens squamous cell carcinoma antigen recognised by T cells (SART1), mRNA                                     |
| NM_021079 | Homo sapiens N-myristoyltransferase 1 (NMT1), mRNA   |
| NM_021046 | Homo sapiens UHS KerB (LOC57830), mRNA   |
| NM_021018 | Homo sapiens H3 histone family, member 1 (H3FI), mRNA  |
| NM_006643 | Homo sapiens serologically defined colon cancer antigen 3 (SDCCAG3), mRNA  |
| NM_017569 | Homo sapiens transcription factor (p38 interacting protein) (P38IP), mRNA  |
| NM_015239 | Homo sapiens KIAA1035 protein (KIAA1035), mRNA   |
| NM_014977 | Homo sapiens KIAA0670 protein/acinus (KIAA0670), mRNA  |
| NM_015176 | Homo sapiens KIAA0483 protein (KIAA0483), mRNA   |
| NM_014610 | Homo sapiens KIAA0088 protein (KIAA0088), mRNA   |
| NM_015516 | Homo sapiens hypothetical protein, estradiol-induced (E2IG4), mRNA   |
| NM_015388 | Homo sapiens DKFZP566C243 protein (DKFZP566C243), mRNA   |
| NM_015679 | Homo sapiens hypothetical protein (CLONE24922), mRNA   |
| NM_014409 | Homo sapiens TAF5-like RNA polymerase II, p300/CBP-associated factor (PCAF)-associated factor, 65 kD (TAF5L), mRNA   |
| NM_014368 | Homo sapiens LIM homeobox protein 6 (LHX6), mRNA   |
| NM_014315 | Homo sapiens host cell factor homolog (LCP), mRNA  |
| NM_012414 | Homo sapiens rab3 GTPase-activating protein, non-catalytic subunit (150kD) (RAB3-GAP150), mRNA                       |
| NM_012219 | Homo sapiens muscle RAS oncogene homolog (MRAS), mRNA  |
| NM_007375 | Homo sapiens TAR DNA binding protein (TARDBP), mRNA  |

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| NM_007074 | Homo sapiens coronin, actin binding protein, 1A (CORO1A), mRNA   |
| NM_006927 | Homo sapiens sialyltransferase 4B (beta-galactosidase alpha-2,3-sialyltransferase) (SIAT4B), mRNA  |
| NM_006861 | Homo sapiens RAB35, member RAS oncogene family (RAB35), mRNA   |
| NM_006502 | Homo sapiens polymerase (DNA directed), eta (POLH), mRNA   |
| NM_005710 | Homo sapiens polyglutamine binding protein 1 (PQBP1), mRNA   |
| NM_005168 | Homo sapiens ras homolog gene family, member E (ARHE), mRNA  |
| NM_004190 | Homo sapiens lipase, gastric (LIPF), mRNA  |
| NM_004132 | Homo sapiens hyaluronan binding protein 2 (HABP2), mRNA  |
| NM_004492 | Homo sapiens general transcription factor IIA, 2 (12kD subunit) (GTF2A2), mRNA   |
| NM_004824 | Homo sapiens chromodomain protein, Y chromosome-like (CDYL), mRNA  |
| NM_003969 | Homo sapiens ubiquitin-conjugating enzyme E2M (UBC12 homolog, yeast) (UBE2M), mRNA   |
| NM_002711 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 3A (glycogen and sarcoplasmic reticulum binding subunit, skeletal muscle) (PPP1R3A), mRNA |
| NM_003847 | Homo sapiens peroxisomal biogenesis factor 11A (PEX11A), mRNA  |
| NM_002004 | Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltranstransferase, geranyltranstransferase) (FDPS), mRNA          |
| NM_019111 | Homo sapiens major histocompatibility complex, class II, DR alpha (HLA-DRA), mRNA  |
| NM_002120 | Homo sapiens major histocompatibility complex, class II, DO beta (HLA-DOB), mRNA   |
| NM_002118 | Homo sapiens major histocompatibility complex, class II, DM beta (HLA-DMB), mRNA   |
| NM_002125 | Homo sapiens major histocompatibility complex, class II, DR beta 5 (HLA-DRB5), mRNA  |
| NM_021983 | Homo sapiens major histocompatibility complex, class II, DR beta 4 (HLA-DRB4), mRNA  |
| NM_022555 | Homo sapiens major histocompatibility complex, class II, DR beta 3 (HLA-DRB3), mRNA  |
| NM_005962 | Homo sapiens MAX interacting protein 1 (MXI1), transcript variant 1, mRNA  |
| NM_130439 | Homo sapiens MAX interacting protein 1 (MXI1), transcript variant 2, mRNA  |
| NM_080923 | Homo sapiens protein tyrosine phosphatase, receptor type, C (PTPRC), transcript variant 4, mRNA  |
| NM_080922 | Homo sapiens protein tyrosine phosphatase, receptor type, C (PTPRC), transcript variant 3, mRNA  |
| NM_080921 | Homo sapiens protein tyrosine phosphatase, receptor type, C (PTPRC), transcript variant 2, mRNA  |
| NM_130386 | Homo sapiens collectin sub-family member 12 (COLEC12), transcript variant I, mRNA  |
| NM_030781 | Homo sapiens collectin sub-family member 12 (COLEC12), transcript variant II, mRNA   |
| NM_130778 | Homo sapiens collagen, type XVII, alpha 1 (COL17A1), transcript variant short, mRNA  |
| NM_000494 | Homo sapiens collagen, type XVII, alpha 1 (COL17A1), transcript variant long, mRNA   |
| NM_001856 | Homo sapiens collagen, type XVI, alpha 1 (COL16A1), mRNA   |
| NM_001855 | Homo sapiens collagen, type XV, alpha 1 (COL15A1), mRNA  |
| NM_058166 | Homo sapiens tripartite motif-containing 6 (TRIM6), mRNA   |
| NM_002838 | Homo sapiens protein tyrosine phosphatase, receptor type, C (PTPRC), transcript  |

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|           | variant 1, mRNA  |
| NM_130390 | Homo sapiens tripartite motif-containing 34 (TRIM34), transcript variant 3, mRNA               |
| NM_130389 | Homo sapiens tripartite motif-containing 34 (TRIM34), transcript variant 2, mRNA               |
| NM_021616 | Homo sapiens tripartite motif-containing 34 (TRIM34), transcript variant 1, mRNA               |
| NM_030950 | Homo sapiens ret finger protein (RFP), transcript variant beta, mRNA                           |
| NM_130785 | Homo sapiens TPTE and PTEN homologous inositol lipid phosphatase (TPIP), mRNA                  |
| NM_130784 | Homo sapiens hypothetical gene supported by AY027807; AY027808 (LOC93426), mRNA                |
| NM_130783 | Homo sapiens similar to neuronal tetraspanin (LOC90139), mRNA                                  |
| NM_130782 | Homo sapiens regulator of G-protein signalling 18 (RGS18), mRNA                                |
| NM_130781 | Homo sapiens (RAB24), mRNA   |
| NM_130772 | Homo sapiens S100Z protein (S100Z), mRNA   |
| NM_130769 | Homo sapiens glycoprotein alpha 2 (GPA2), mRNA   |
| NM_130770 | Homo sapiens 5-hydroxytryptamine receptor 3 subunit C (HTR3C), mRNA                            |
| NM_130768 | Homo sapiens GASZ (GASZ), mRNA   |
| NM_130767 | Homo sapiens cytosolic acetyl-CoA hydrolase (CACH-1), mRNA                                     |
| NM_130773 | Homo sapiens caspr5 protein (caspr5), mRNA   |
| NM_006510 | Homo sapiens ret finger protein (RFP), transcript variant alpha, mRNA                          |
| NM_033554 | Homo sapiens major histocompatibility complex, class II, DP alpha 1 (HLA-DPA1), mRNA           |
| NM_033282 | Homo sapiens opsin 4 (melanopsin) (OPN4), mRNA   |
| NM_032035 | Homo sapiens MSTP031 protein (MSTP031), mRNA   |
| NM_017882 | Homo sapiens ceroid-lipofuscinosis, neuronal 6, late infantile, variant (CLN6), mRNA           |
| NM_006983 | Homo sapiens matrix metalloproteinase 23B (MMP23B), mRNA                                       |
| NM_005608 | Homo sapiens protein tyrosine phosphatase, receptor type, C-associated protein (PTPRCAP), mRNA |
| NM_004659 | Homo sapiens matrix metalloproteinase 23A (MMP23A), mRNA                                       |
| NM_025091 | Homo sapiens hypothetical protein FLJ13330 (FLJ13330), mRNA                                    |
| NM_130759 | Homo sapiens immunity associated protein 1 (IMAP1), mRNA                                       |
| NM_019841 | Homo sapiens transient receptor potential cation channel, subfamily V, member 5 (TRPV5), mRNA  |
| NM_017584 | Homo sapiens aldehyde reductase (aldose reductase) like 6 (ALDRL6), mRNA                       |
| NM_017436 | Homo sapiens alpha 1,4-galactosyltransferase (A4GALT), mRNA                                    |
| NM_006480 | Homo sapiens regulator of G-protein signalling 14 (RGS14), mRNA                                |
| NM_013357 | Homo sapiens purine-rich element binding protein G (PURG), mRNA                                |
| NM_016155 | Homo sapiens matrix metalloproteinase 17 (membrane-inserted) (MMP17), mRNA                     |
| NM_002813 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 9 (PSMD9), mRNA          |
| NM_024549 | Homo sapiens hypothetical protein FLJ21127 (FLJ21127), mRNA                                    |
| NM_130441 | Homo sapiens dendritic cell lectin b (DLEC), mRNA  |
| NM_015409 | Homo sapiens E1A binding protein p400 (EP400), mRNA  |
| NM_003702 | Homo sapiens regulator of G-protein signalling 20 (RGS20), mRNA                                |
| NM_016113 | Homo sapiens transient receptor potential cation channel, subfamily V, member 2 (TRPV2), mRNA  |
| NM_015530 | Homo sapiens likely ortholog of rat golgi stacking protein homolog GRASP55 (GRASP55), mRNA     |

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| NM_005873 | Homo sapiens regulator of G-protein signalling 19 (RGS19), mRNA  |
| NM_130469 | Homo sapiens Jun dimerization protein 2 (jdp2), mRNA   |
| NM_130468 | Homo sapiens dermatan-4-sulfotransferase-1 (D4ST-1), mRNA  |
| NM_130467 | Homo sapiens PAGE-5 protein (PAGE-5), mRNA   |
| NM_130463 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) (ATP6G), mRNA                           |
| NM_130459 | Homo sapiens torsin family 2, member A (TOR2A), mRNA   |
| NM_021070 | Homo sapiens latent transforming growth factor beta binding protein 3 (LTBP3), mRNA  |
| NM_020865 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 36 (DDX36), mRNA   |
| NM_016304 | Homo sapiens 60S ribosomal protein L30 isolog (LOC51187), mRNA   |
| NM_130443 | Homo sapiens dipeptidylpeptidase III (DPP3), transcript variant 2, mRNA  |
| NM_005700 | Homo sapiens dipeptidylpeptidase III (DPP3), transcript variant 1, mRNA  |
| NM_018152 | Homo sapiens chromosome 20 open reading frame 12 (C20orf12), mRNA  |
| NM_006027 | Homo sapiens exonuclease 1 (EXO1), transcript variant 1, mRNA  |
| NM_003686 | Homo sapiens exonuclease 1 (EXO1), transcript variant 3, mRNA  |
| NM_130398 | Homo sapiens exonuclease 1 (EXO1), transcript variant 2, mRNA  |
| NM_002837 | Homo sapiens protein tyrosine phosphatase, receptor type, B (PTPRB), mRNA  |
| NM_000775 | Homo sapiens cytochrome P450, subfamily IIJ (arachidonic acid epoxygenase) polypeptide 2 (CYP2J2), mRNA                    |
| NM_053056 | Homo sapiens cyclin D1 (PRAD1 parathyroid adenomatosis 1) (CCND1), mRNA  |
| NM_012090 | Homo sapiens microtubule-actin crosslinking factor 1 (MACF1), transcript variant 1, mRNA                                   |
| NM_017625 | Homo sapiens intelectin (ITLN), mRNA   |
| NM_015839 | Homo sapiens ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2), transcript variant SV3, mRNA       |
| NM_015838 | Homo sapiens ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2), transcript variant SV2, mRNA       |
| NM_015837 | Homo sapiens ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2), transcript variant SV1, mRNA       |
| NM_002003 | Homo sapiens ficolin (collagen/fibrinogen domain containing) 1 (FCN1), mRNA  |
| NM_016327 | Homo sapiens ureidopropionase, beta (UPB1), mRNA   |
| NM_016328 | Homo sapiens GTF2I repeat domain containing 1 (GTF2IRD1), transcript variant 1, mRNA                                       |
| NM_004108 | Homo sapiens ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2), transcript variant SV0, mRNA       |
| NM_002318 | Homo sapiens lysyl oxidase-like 2 (LOXL2), mRNA  |
| NM_130396 | Homo sapiens WNT1 inducible signaling pathway protein 3 (WISP3), transcript variant 2, mRNA                                |
| NM_003880 | Homo sapiens WNT1 inducible signaling pathway protein 3 (WISP3), transcript variant 1, mRNA                                |
| NM_003881 | Homo sapiens WNT1 inducible signaling pathway protein 2 (WISP2), mRNA  |
| NM_080838 | Homo sapiens WNT1 inducible signaling pathway protein 1 (WISP1), transcript variant 2, mRNA                                |
| NM_003882 | Homo sapiens WNT1 inducible signaling pathway protein 1 (WISP1), transcript variant 1, mRNA                                |
| NM_000651 | Homo sapiens complement component (3b/4b) receptor 1, including Knops blood group system (CRI), transcript variant S, mRNA |
| NM_000573 | Homo sapiens complement component (3b/4b) receptor 1, including Knops blood group system (CRI), transcript variant F, mRNA |

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| NM_006069 | Homo sapiens murine retrovirus integration site 1 homolog (MRV11), transcript variant 1, mRNA                    |
| NM_130385 | Homo sapiens murine retrovirus integration site 1 homolog (MRV11), transcript variant 2, mRNA                    |
| NM_018492 | Homo sapiens T-LAK cell-originated protein kinase (TOPK), mRNA   |
| NM_002462 | Homo sapiens myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse) (MX1), mRNA      |
| NM_015920 | Homo sapiens ribosomal protein S27-like (RPS27L), mRNA   |
| NM_016183 | Homo sapiens ribosomal protein, large, P0-like (RPLP0L), mRNA  |
| NM_080746 | Homo sapiens ribosomal protein L10-like (RPL10L), mRNA   |
| NM_032236 | Homo sapiens FLJ23277 protein (FLJ23277), mRNA   |
| NM_032784 | Homo sapiens thrombospondin (FLJ14440), mRNA   |
| NM_080731 | Homo sapiens intermediate filament-like MGC:2625 (DKFZP586I2223), transcript variant 3, mRNA                     |
| NM_080730 | Homo sapiens intermediate filament-like MGC:2625 (DKFZP586I2223), transcript variant 2, mRNA                     |
| NM_015945 | Homo sapiens ovarian cancer overexpressed 1 (OVCOV1), mRNA   |
| NM_018018 | Homo sapiens solute carrier family 38, member 4 (SLC38A4), mRNA  |
| NM_022451 | Homo sapiens AD24 protein (AD24), mRNA   |
| NM_020830 | Homo sapiens phosphoinositide-binding protein SR1 (FENS-1), mRNA   |
| NM_033630 | Homo sapiens SCAN domain containing 1 (SCAND1), transcript variant 2, mRNA                                       |
| NM_016558 | Homo sapiens SCAN domain containing 1 (SCAND1), transcript variant 1, mRNA                                       |
| NM_015438 | Homo sapiens intermediate filament-like MGC:2625 (DKFZP586I2223), transcript variant 1, mRNA                     |
| NM_007371 | Homo sapiens bromodomain containing 3 (BRD3), mRNA   |
| NM_005104 | Homo sapiens bromodomain containing 2 (BRD2), mRNA   |
| NM_005031 | Homo sapiens FXYD domain containing ion transport regulator 1 (phospholemma) (FXYD1), transcript variant a, mRNA |
| NM_021902 | Homo sapiens FXYD domain containing ion transport regulator 1 (phospholemma) (FXYD1), transcript variant b, mRNA |
| NM_014164 | Homo sapiens FXYD domain-containing ion transport regulator 5 (FXYD5), mRNA                                      |
| NM_002463 | Homo sapiens myxovirus (influenza virus) resistance 2 (mouse) (MX2), mRNA  |
| NM_014577 | Homo sapiens bromodomain containing 1 (BRD1), mRNA   |
| NM_021004 | Homo sapiens peroxisomal short-chain alcohol dehydrogenase (humNRDR), mRNA                                       |
| NM_020399 | Homo sapiens PDZ/coiled-coil domain binding partner for the rho-family GTPase TC10 (PIST), mRNA                  |
| NM_017935 | Homo sapiens hypothetical protein FLJ20706 (BANK), mRNA  |
| NM_018244 | Homo sapiens chromosome 20 open reading frame 44 (C20orf44), mRNA  |
| NM_016100 | Homo sapiens N-acetyltransferase 5 (ARD1 homolog, S. cerevisiae) (NAT5), mRNA                                    |
| NM_016045 | Homo sapiens chromosome 20 open reading frame 45 (C20orf45), mRNA  |
| NM_007363 | Homo sapiens non-POU domain containing, octamer-binding (NONO), mRNA   |
| NM_002438 | Homo sapiens mannose receptor, C type 1 (MRC1), mRNA   |
| NM_015092 | Homo sapiens PI-3-kinase-related kinase SMG-1 (SMG1), mRNA   |
| NM_018993 | Homo sapiens RAB5 interacting protein 2 (RIN2), mRNA   |
| NM_080841 | Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), transcript variant 3, mRNA                  |
| NM_080840 | Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA),   |

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|           | transcript variant 2, mRNA  |
| NM_002836 | Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), transcript variant 1, mRNA                     |
| NM_024832 | Homo sapiens RAB5 interacting protein 3 (RIN3), mRNA  |
| NM_023915 | Homo sapiens G protein-coupled receptor 87 (GPR87), mRNA  |
| NM_003029 | Homo sapiens SHC (Src homology 2 domain containing) transforming protein 1 (SHC1), mRNA                             |
| NM_018490 | Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA  |
| NM_016020 | Homo sapiens homolog of yeast mitochondrial transcription factor B (mtTFB), mRNA                                    |
| NM_014475 | Homo sapiens dihydrodiol dehydrogenase (dimeric) (DHDH), mRNA   |
| NM_006065 | Homo sapiens signal-regulatory protein beta 1 (SIRPB1), mRNA  |
| NM_005527 | Homo sapiens heat shock 70kD protein 1-like (HSPA1L), mRNA  |
| NM_004648 | Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1), mRNA                             |
| NM_004480 | Homo sapiens fucosyltransferase 8 (alpha (1,6) fucosyltransferase) (FUT8), mRNA                                     |
| NM_003667 | Homo sapiens G protein-coupled receptor 49 (GPR49), mRNA  |
| NM_130434 | Homo sapiens dipeptidylpeptidase 8 (DPP8), transcript variant 1, mRNA   |
| NM_017743 | Homo sapiens dipeptidylpeptidase 8 (DPP8), transcript variant 2, mRNA   |
| NM_002122 | Homo sapiens major histocompatibility complex, class II, DQ alpha 1 (HLA-DQA1), mRNA                                |
| NM_006442 | Homo sapiens DR1-associated protein 1 (negative cofactor 2 alpha) (DRAP1), mRNA                                     |
| NM_080918 | Homo sapiens deoxyguanosine kinase (DGUOK), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA |
| NM_080917 | Homo sapiens deoxyguanosine kinase (DGUOK), transcript variant 3, nuclear gene encoding mitochondrial protein, mRNA |
| NM_080916 | Homo sapiens deoxyguanosine kinase (DGUOK), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA |
| NM_080915 | Homo sapiens deoxyguanosine kinase (DGUOK), transcript variant 5, nuclear gene encoding mitochondrial protein, mRNA |
| NM_001929 | Homo sapiens deoxyguanosine kinase (DGUOK), transcript variant 4, nuclear gene encoding mitochondrial protein, mRNA |
| NM_080815 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 19, mRNA                                    |
| NM_080814 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 18, mRNA                                    |
| NM_080813 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 17, mRNA                                    |
| NM_080812 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 16, mRNA                                    |
| NM_080811 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 15, mRNA                                    |
| NM_080810 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 14, mRNA                                    |
| NM_080809 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 13, mRNA                                    |
| NM_080808 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 12, mRNA                                    |
| NM_080807 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 11, mRNA                                    |

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| NM_080806 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 10, mRNA                         |
| NM_080805 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 9, mRNA                          |
| NM_080804 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 8, mRNA                          |
| NM_080803 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 7, mRNA                          |
| NM_080802 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 6, mRNA                          |
| NM_080801 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 5, mRNA                          |
| NM_080800 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 4, mRNA                          |
| NM_080799 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 3, mRNA                          |
| NM_080798 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 2, mRNA                          |
| NM_005203 | Homo sapiens collagen, type XIII, alpha 1 (COL13A1), transcript variant 1, mRNA                          |
| NM_004395 | Homo sapiens drebrin 1 (DBN1), transcript variant 1, mRNA  |
| NM_080881 | Homo sapiens drebrin 1 (DBN1), transcript variant 2, mRNA  |
| NM_080792 | Homo sapiens brain-immunoglobulin-like molecule with tyrosine-based activation motifs (BIT), mRNA        |
| NM_080816 | Homo sapiens signal-regulatory protein beta 2 (SIRPB2), transcript variant 2, mRNA                       |
| NM_018556 | Homo sapiens signal-regulatory protein beta 2 (SIRPB2), transcript variant 1, mRNA                       |
| NM_000787 | Homo sapiens dopamine beta-hydroxylase (dopamine beta-monooxygenase) (DBH), mRNA                         |
| NM_080426 | Homo sapiens GNAS complex locus (GNAS), transcript variant 2, mRNA                                       |
| NM_080425 | Homo sapiens GNAS complex locus (GNAS), transcript variant 3, mRNA                                       |
| NM_000516 | Homo sapiens GNAS complex locus (GNAS), transcript variant 1, mRNA                                       |
| NM_006571 | Homo sapiens novel RGD-containing protein (WS-3), mRNA   |
| NM_080926 | Homo sapiens hypothetical protein similar to KIAA0187 gene product (LOC96610), mRNA                      |
| NM_080924 | Homo sapiens hypothetical protein similar to CGI-67 protein (LOC91219), mRNA                             |
| NM_080925 | Homo sapiens hypothetical protein similar to topoisomerase (DNA) III beta (H. sapiens) (LOC129020), mRNA |
| NM_080914 | Homo sapiens asialoglycoprotein receptor 2 (ASGR2), transcript variant 3, mRNA                           |
| NM_080913 | Homo sapiens asialoglycoprotein receptor 2 (ASGR2), transcript variant 2, mRNA                           |
| NM_080912 | Homo sapiens asialoglycoprotein receptor 2 (ASGR2), transcript variant H2', mRNA                         |
| NM_001181 | Homo sapiens asialoglycoprotein receptor 2 (ASGR2), transcript variant 1, mRNA                           |
| NM_001671 | Homo sapiens asialoglycoprotein receptor 1 (ASGR1), mRNA   |
| NM_005065 | Homo sapiens sel-1 suppressor of lin-12-like (C. elegans) (SEL1L), mRNA                                  |
| NM_014978 | Homo sapiens VPS10 domain receptor protein SORCS 3 (SORCS3), mRNA  |
| NM_015230 | Homo sapiens centaurin, delta 1 (CENTD1), mRNA   |

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| NM_052868  | Homo sapiens immunoglobulin superfamily, member 8 (IGSF8), mRNA   |
| NM_032782  | Homo sapiens hypothetical protein FLJ14428 (TIM3), mRNA   |
| NM_032309  | Homo sapiens chromosome 2 open reading frame 9 (C2orf9), mRNA   |
| NM_021625  | Homo sapiens transient receptor potential cation channel, subfamily V, member 4 (TRPV4), mRNA                   |
| NM_020960  | Homo sapiens G protein-coupled receptor 107 (GPR107), mRNA  |
| NM_024503  | Homo sapiens human immunodeficiency virus type I enhancer binding protein 3 (HIVEP3), mRNA                      |
| NM_024112  | Homo sapiens chromosome 9 open reading frame 16 (C9orf16), mRNA   |
| NM_015192  | Homo sapiens phospholipase C, beta 1 (phosphoinositide-specific) (PLCB1), mRNA                                  |
| NM_022481  | Homo sapiens ARF-GAP, RHO-GAP, ankyrin repeat and plekstrin homology domains-containing protein 3 (ARAP3), mRNA |
| NM_021634  | Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 7 (LGR7), mRNA                           |
| NM_013305  | Homo sapiens sialyltransferase 8E (alpha-2, 8-polysialyltransferase) (SIAT8E), mRNA                             |
| NM_019069  | Homo sapiens WD repeat domain 5B (WDR5B), mRNA  |
| NM_016179  | Homo sapiens transient receptor potential cation channel, subfamily C, member 4 (TRPC4), mRNA                   |
| NM_016592  | Homo sapiens GNAS complex locus (GNAS), transcript variant 4, mRNA  |
| NM_014007  | Homo sapiens zinc finger protein 297B (ZNF297B), mRNA   |
| NM_012471  | Homo sapiens transient receptor potential cation channel, subfamily C, member 5 (TRPC5), mRNA                   |
| NM_012459  | Homo sapiens translocase of inner mitochondrial membrane 8 homolog B (yeast) (TIMM8B), mRNA                     |
| NM_004621  | Homo sapiens transient receptor potential cation channel, subfamily C, member 6 (TRPC6), mRNA                   |
| NM_003304  | Homo sapiens transient receptor potential cation channel, subfamily C, member 1 (TRPC1), mRNA                   |
| NM_002124  | Homo sapiens major histocompatibility complex, class II, DR beta 1 (HLA-DRB1), mRNA                             |
| NM_000972  | Homo sapiens ribosomal protein L7a (RPL7A), mRNA  |
| NM_0130384 | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 6, mRNA                               |
| NM_033627  | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 2, mRNA                               |
| NM_032166  | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 5, mRNA                               |
| NM_024996  | Homo sapiens mitochondrial elongation factor G (EFG1), mRNA   |
| NM_033629  | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 4, mRNA                               |
| NM_033628  | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 3, mRNA                               |
| NM_016381  | Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 1, mRNA                               |
| NM_031892  | Homo sapiens SH3-domain kinase binding protein 1 (SH3KBP1), mRNA  |
| NM_003960  | Homo sapiens N-acetyltransferase 8 (camello like) (NAT8), mRNA  |
| NM_021093  | Homo sapiens peptide YY, 2 (seminalplasmin) (PYY2), mRNA  |
| NM_021092  | Homo sapiens pancreatic polypeptide 2 (PPY2), mRNA  |
| NM_021190  | Homo sapiens polypyrimidine tract binding protein 2 (PTBP2), mRNA   |
| NM_013998  | Homo sapiens tachykinin, precursor 1 (substance K, substance P, neurokinin 1,                                   |



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|           | neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma) (TAC1), transcript variant delta, mRNA   |
| NM_013997 | Homo sapiens tachykinin, precursor 1 (substance K, substance P, neurokinin 1, neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma) (TAC1), transcript variant gamma, mRNA |
| NM_013996 | Homo sapiens tachykinin, precursor 1 (substance K, substance P, neurokinin 1, neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma) (TAC1), transcript variant alpha, mRNA |
| NM_016235 | Homo sapiens G protein-coupled receptor, family C, group 1, member B (GPRC5B), mRNA  |
| NM_004630 | Homo sapiens splicing factor 1 (SF1), mRNA   |
| NM_000230 | Homo sapiens leptin (obesity homolog, mouse) (LEP), mRNA   |
| NM_003185 | Homo sapiens TAF4 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 135 kD (TAF4), mRNA   |
| NM_003182 | Homo sapiens tachykinin, precursor 1 (substance K, substance P, neurokinin 1, neurokinin 2, neuromedin L, neurokinin alpha, neuropeptide K, neuropeptide gamma) (TAC1), transcript variant beta, mRNA  |
| NM_002772 | Homo sapiens protease, serine, 7 (enterokinase) (PRSS7), mRNA  |
| NM_005857 | Homo sapiens zinc metalloproteinase (STE24 homolog, yeast) (ZMPSTE24), mRNA  |
| NM_006103 | Homo sapiens WAP four-disulfide core domain 2 (WFDC2), transcript variant 1, mRNA  |
| NM_080736 | Homo sapiens WAP four-disulfide core domain 2 (WFDC2), transcript variant 2, mRNA  |
| NM_080735 | Homo sapiens WAP four-disulfide core domain 2 (WFDC2), transcript variant 5, mRNA  |
| NM_080734 | Homo sapiens WAP four-disulfide core domain 2 (WFDC2), transcript variant 4, mRNA  |
| NM_080733 | Homo sapiens WAP four-disulfide core domain 2 (WFDC2), transcript variant 3, mRNA  |
| NM_021197 | Homo sapiens WAP four-disulfide core domain 1 (WFDC1), mRNA  |
| NM_007128 | Homo sapiens pre-B lymphocyte gene 1 (VPREB1), mRNA  |
| NM_006373 | Homo sapiens vesicle amine transport protein 1 (VAT1), mRNA  |
| NM_003105 | Homo sapiens sortilin-related receptor, L(DLR class) A repeats-containing (SORL1), mRNA  |
| NM_020777 | Homo sapiens VPS10 domain receptor protein (SORCS2), mRNA  |
| NM_052918 | Homo sapiens VPS10 domain receptor protein SORCS 1 (SORCS1), mRNA  |
| NM_022553 | Homo sapiens SAC2 suppressor of actin mutations 2-like (yeast) (SACM2L), transcript variant 2, mRNA  |
| NM_004843 | Homo sapiens class I cytokine receptor (WSX1), mRNA  |
| NM_080564 | Homo sapiens SAC2 suppressor of actin mutations 2-like (yeast) (SACM2L), transcript variant 1, mRNA  |
| NM_006711 | Homo sapiens RNA binding protein S1, serine-rich domain (RNPS1), transcript variant 1, mRNA  |
| NM_080594 | Homo sapiens RNA binding protein S1, serine-rich domain (RNPS1), transcript variant 2, mRNA  |
| NM_100486 | Homo sapiens WW domain-containing adapter with a coiled-coil region (WAC), transcript variant 3, mRNA  |
| NM_100264 | Homo sapiens WW domain-containing adapter with a coiled-coil region (WAC), transcript variant 2, mRNA  |
| NM_016628 | Homo sapiens WW domain-containing adapter with a coiled-coil region (WAC), transcript variant 1, mRNA  |

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| NM_005701 | Homo sapiens RNA, U transporter 1 (RNUT1), mRNA  |
| NM_014810 | Homo sapiens centrosome-associated protein 350 (CAP350), mRNA  |
| NM_013325 | Homo sapiens KIAA0943 protein (Apg4B), mRNA  |
| NM_020235 | Homo sapiens bobby sox homolog (Drosophila) (BBX), mRNA  |
| NM_019118 | Homo sapiens hypothetical protein RP4-622L5 (RP4-622L5), mRNA  |
| NM_016312 | Homo sapiens WW domain binding protein 11 (WBP11), mRNA  |
| NM_018706 | Homo sapiens KIAA1630 protein (KIAA1630), mRNA   |
| NM_080599 | Homo sapiens regulator of nonsense transcripts 2 (RENT2), transcript variant 1, mRNA   |
| NM_015542 | Homo sapiens regulator of nonsense transcripts 2 (RENT2), transcript variant 2, mRNA   |
| NM_002911 | Homo sapiens regulator of nonsense transcripts 1 (RENT1), mRNA   |
| NM_002833 | Homo sapiens protein tyrosine phosphatase, non-receptor type 9 (PTPN9), mRNA   |
| NM_080589 | Homo sapiens protein tyrosine phosphatase, non-receptor type 7 (PTPN7), transcript variant 3, mRNA   |
| NM_080588 | Homo sapiens protein tyrosine phosphatase, non-receptor type 7 (PTPN7), transcript variant 2, mRNA   |
| NM_002832 | Homo sapiens protein tyrosine phosphatase, non-receptor type 7 (PTPN7), transcript variant 1, mRNA   |
| NM_007039 | Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA   |
| NM_014369 | Homo sapiens protein tyrosine phosphatase, non-receptor type 18 (brain-derived) (PTPN18), mRNA   |
| NM_005401 | Homo sapiens protein tyrosine phosphatase, non-receptor type 14 (PTPN14), mRNA   |
| NM_002835 | Homo sapiens protein tyrosine phosphatase, non-receptor type 12 (PTPN12), mRNA   |
| NM_080685 | Homo sapiens protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase) (PTPN13), transcript variant 4, mRNA |
| NM_080684 | Homo sapiens protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase) (PTPN13), transcript variant 3, mRNA |
| NM_080683 | Homo sapiens protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase) (PTPN13), transcript variant 1, mRNA |
| NM_080601 | Homo sapiens protein tyrosine phosphatase, non-receptor type 11 (PTPN11), transcript variant 2, mRNA   |
| NM_002834 | Homo sapiens protein tyrosine phosphatase, non-receptor type 11 (PTPN11), transcript variant 1, mRNA   |
| NM_006399 | Homo sapiens basic leucine zipper transcription factor, ATF-like (BATF), mRNA  |
| NM_006709 | Homo sapiens HLA-B associated transcript 8 (BAT8), transcript variant NG36/G9a, mRNA   |
| NM_033177 | Homo sapiens HLA-B associated transcript 4 (BAT4), mRNA  |
| NM_004639 | Homo sapiens HLA-B associated transcript 3 (BAT3), transcript variant 1, mRNA  |
| NM_080703 | Homo sapiens HLA-B associated transcript 3 (BAT3), transcript variant 3, mRNA  |
| NM_080702 | Homo sapiens HLA-B associated transcript 3 (BAT3), transcript variant 2, mRNA  |
| NM_004638 | Homo sapiens HLA-B associated transcript 2 (BAT2), transcript variant 2, mRNA  |
| NM_080686 | Homo sapiens HLA-B associated transcript 2 (BAT2), transcript variant 1, mRNA  |

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|           | mRNA   |
| NM_004640 | Homo sapiens HLA-B associated transcript 1 (BAT1), transcript variant 1, mRNA            |
| NM_080598 | Homo sapiens HLA-B associated transcript 1 (BAT1), transcript variant 2, mRNA            |
| NM_080797 | Homo sapiens death associated transcription factor 1 (DATF1), transcript variant 3, mRNA |
| NM_080796 | Homo sapiens death associated transcription factor 1 (DATF1), transcript variant 2, mRNA |
| NM_022105 | Homo sapiens death associated transcription factor 1 (DATF1), transcript variant 1, mRNA |
| NM_021080 | Homo sapiens disabled homolog 1 (Drosophila) (DAB1), mRNA                                |
| NM_080760 | Homo sapiens dachshund homolog (Drosophila) (DACH), transcript variant 2, mRNA           |
| NM_080759 | Homo sapiens dachshund homolog (Drosophila) (DACH), transcript variant 1, mRNA           |
| NM_004392 | Homo sapiens dachshund homolog (Drosophila) (DACH), transcript variant 3, mRNA           |
| NM_005996 | Homo sapiens T-box 3 (ulnar mammary syndrome) (TBX3), transcript variant 1, mRNA         |
| NM_016569 | Homo sapiens T-box 3 (ulnar mammary syndrome) (TBX3), transcript variant 2, mRNA         |
| NM_016954 | Homo sapiens T-box 22 (TBX22), mRNA  |
| NM_080701 | Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 4, mRNA        |
| NM_080700 | Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 3, mRNA        |
| NM_080699 | Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 2, mRNA        |
| NM_017518 | Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 5, mRNA        |
| NM_007205 | Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 1, mRNA        |
| NM_080632 | Homo sapiens similar to yeast Upf3, variant B (UPF3B), transcript variant 1, mRNA        |
| NM_023010 | Homo sapiens similar to yeast Upf3, variant B (UPF3B), transcript variant 2, mRNA        |
| NM_080687 | Homo sapiens similar to yeast Upf3, variant A (UPF3A), transcript variant 2, mRNA        |
| NM_023011 | Homo sapiens similar to yeast Upf3, variant A (UPF3A), transcript variant 1, mRNA        |
| NM_080630 | Homo sapiens collagen, type XI, alpha 1 (COL11A1), transcript variant C, mRNA            |
| NM_080629 | Homo sapiens collagen, type XI, alpha 1 (COL11A1), transcript variant B, mRNA            |
| NM_001854 | Homo sapiens collagen, type XI, alpha 1 (COL11A1), transcript variant A, mRNA            |
| NM_080791 | Homo sapiens acid phosphatase, testicular (ACPT), transcript variant A3, mRNA            |
| NM_001639 | Homo sapiens amyloid P component, serum (APCS), mRNA                                     |
| NM_080790 | Homo sapiens acid phosphatase, testicular (ACPT), transcript variant A2, mRNA            |
| NM_080789 | Homo sapiens acid phosphatase, testicular (ACPT), transcript variant A1, mRNA            |
| NM_033068 | Homo sapiens acid phosphatase, testicular (ACPT), transcript variant A, mRNA             |

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| NM_001649 | Homo sapiens apical protein-like ( <i>Xenopus laevis</i> ) (APXL), mRNA   |
| NM_014481 | Homo sapiens apurinic/aprimidinic endonuclease-like 2 (APEXL2), nuclear gene encoding mitochondrial protein, mRNA                 |
| NM_080649 | Homo sapiens APEX nuclease (multifunctional DNA repair enzyme) (APEX), transcript variant 3, mRNA                                 |
| NM_080648 | Homo sapiens APEX nuclease (multifunctional DNA repair enzyme) (APEX), transcript variant 2, mRNA                                 |
| NM_001641 | Homo sapiens APEX nuclease (multifunctional DNA repair enzyme) (APEX), transcript variant 1, mRNA                                 |
| NM_080839 | Homo sapiens similar to gamma-glutamyltransferase 1 (LOC91227), mRNA  |
| NM_080927 | Homo sapiens endothelial and smooth muscle cell-derived neuropilin-like protein (ESDN), mRNA                                      |
| NM_030969 | Homo sapiens hypothetical protein MGC1223 (MGC1223), mRNA   |
| NM_080920 | Homo sapiens gamma-glutamyltransferase-like activity 4 (GGTLA4), mRNA   |
| NM_021168 | Homo sapiens RAR (RAS like GTPASE) like (RARL), mRNA  |
| NM_080842 | Homo sapiens hypothetical gene similar to gamma-glutamyltransferase-like activity 1 (LOC129026), mRNA                             |
| NM_031460 | Homo sapiens potassium channel, subfamily K, member 17 (TASK-4) (KCNK17), mRNA  |
| NM_033056 | Homo sapiens protocadherin 15 (PCDH15), mRNA  |
| NM_053283 | Homo sapiens dermcidin (DCD), mRNA  |
| NM_033518 | Homo sapiens solute carrier family 38, member 5 (SLC38A5), mRNA   |
| NM_021160 | Homo sapiens HLA-B associated transcript 5 (BAT5), mRNA   |
| NM_002279 | Homo sapiens keratin, hair, acidic, 3B (KRTHA3B), mRNA  |
| NM_004138 | Homo sapiens keratin, hair, acidic, 3A (KRTHA3A), mRNA  |
| NM_016310 | Homo sapiens polymerase (RNA) III (DNA directed) polypeptide K (12.3 kD) (POLR3K), mRNA   |
| NM_031991 | Homo sapiens polypyrimidine tract binding protein 1 (PTBP1), transcript variant 3, mRNA   |
| NM_031990 | Homo sapiens polypyrimidine tract binding protein 1 (PTBP1), transcript variant 2, mRNA   |
| NM_002819 | Homo sapiens polypyrimidine tract binding protein 1 (PTBP1), transcript variant 1, mRNA   |
| NM_030930 | Homo sapiens unc-93 homolog B1 ( <i>C. elegans</i> ) (UNC93B1), mRNA  |
| NM_022454 | Homo sapiens SRY-related HMG-box transcription factor SOX17 (SOX17), mRNA   |
| NM_004652 | Homo sapiens ubiquitin specific protease 9, X chromosome (fat facets-like <i>Drosophila</i> ) (USP9X), transcript variant 1, mRNA |
| NM_021906 | Homo sapiens ubiquitin specific protease 9, X chromosome (fat facets-like <i>Drosophila</i> ) (USP9X), transcript variant 2, mRNA |
| NM_022349 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 6A (MS4A6A), mRNA   |
| NM_022122 | Homo sapiens matrix metalloproteinase 27 (MMP27), mRNA  |
| NM_006387 | Homo sapiens calcium homeostasis endoplasmic reticulum protein (CHERP), mRNA  |
| NM_006918 | Homo sapiens sterol-C5-desaturase (ERG3 delta-5-desaturase homolog, fungal)-like (SC5DL), mRNA                                    |
| NM_020151 | Homo sapiens START domain containing 7 (STARD7), mRNA   |
| NM_018976 | Homo sapiens solute carrier family 38, member 2 (SLC38A2), mRNA   |
| NM_013351 | Homo sapiens T-box 21 (TBX21), mRNA   |
| NM_006993 | Homo sapiens nucleophosmin/nucleoplasmin, 3 (NPM3), mRNA  |
| NM_002420 | Homo sapiens transient receptor potential cation channel, subfamily M, member   |

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|           | 1 (TRPM1), mRNA   |
| NM_007244 | Homo sapiens proline rich 4 (lacrimal) (PROL4), mRNA  |
| NM_006758 | Homo sapiens U2(RNU2) small nuclear RNA auxillary factor 1 (U2AF1), mRNA  |
| NM_006264 | Homo sapiens protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase) (PTPN13), transcript variant 2, mRNA    |
| NM_006055 | Homo sapiens LanC lantibiotic synthetase component C-like 1 (bacterial) (LANCL1), mRNA  |
| NM_005716 | Homo sapiens regulator of G-protein signalling 19 interacting protein 1 (RGS19IP1), mRNA  |
| NM_005149 | Homo sapiens T-box 19 (TBX19), mRNA   |
| NM_004231 | Homo sapiens ATPase, vacuolar, 14 kD (ATP6S14), mRNA  |
| NM_000275 | Homo sapiens oculocutaneous albinism II (pink-eye dilution homolog, mouse) (OCA2), mRNA   |
| NM_001384 | Homo sapiens diphtheria toxin resistance protein required for diphthamide biosynthesis-like 2 (S. cerevisiae) (DPH2L2), mRNA                      |
| NM_000062 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade G (C1 inhibitor), member 1, (angioedema, hereditary) (SERPING1), mRNA               |
| NM_003307 | Homo sapiens transient receptor potential cation channel, subfamily M, member 2 (TRPM2), mRNA   |
| NM_003807 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14), mRNA  |
| NM_002984 | Homo sapiens small inducible cytokine A4 (SCYA4), mRNA  |
| NM_002105 | Homo sapiens H2A histone family, member X (H2AFX), mRNA   |
| NM_005331 | Homo sapiens hemoglobin, theta 1 (HBQ1), mRNA   |
| NM_000558 | Homo sapiens hemoglobin, alpha 1 (HBA1), mRNA   |
| NM_000517 | Homo sapiens hemoglobin, alpha 2 (HBA2), mRNA   |
| NM_012262 | Homo sapiens heparan sulfate 2-O-sulfotransferase 1 (HS2ST1), mRNA  |
| NM_021213 | Homo sapiens phosphatidylcholine transfer protein (PCTP), mRNA  |
| NM_018960 | Homo sapiens glycine N-methyltransferase (GNMT), mRNA   |
| NM_017807 | Homo sapiens O-sialoglycoprotein endopeptidase (OSGEP), mRNA  |
| NM_016732 | Homo sapiens RNA binding protein (autoantigenic, hnRNP-associated with lethal yellow) (RALY), transcript variant 1, mRNA                          |
| NM_014483 | Homo sapiens RNA binding motif, single stranded interacting protein (RBMS3), mRNA   |
| NM_012320 | Homo sapiens lysophospholipase 3 (LYPLA3), mRNA   |
| NM_000184 | Homo sapiens hemoglobin, gamma G (HBG2), mRNA   |
| NM_005330 | Homo sapiens hemoglobin, epsilon 1 (HBE1), mRNA   |
| NM_007367 | Homo sapiens RNA binding protein (autoantigenic, hnRNP-associated with lethal yellow) (RALY), transcript variant 2, mRNA                          |
| NM_005332 | Homo sapiens hemoglobin, zeta (HBZ), mRNA   |
| NM_005438 | Homo sapiens FOS-like antigen 1 (FOSL1), mRNA   |
| NM_000158 | Homo sapiens glucan (1,4-alpha-), branching enzyme 1 (glycogen branching enzyme, Andersen disease, glycogen storage disease type IV) (GBE1), mRNA |
| NM_000559 | Homo sapiens hemoglobin, gamma A (HBG1), mRNA   |
| NG_000007 | Homo sapiens genomic beta globin region (HBB@) on chromosome 11   |
| NG_000006 | Homo sapiens genomic alpha globin region (HBA@) on chromosome 16  |
| NM_030964 | Homo sapiens sprouty homolog 4 (Drosophila) (SPRY4), mRNA   |
| NM_021181 | Homo sapiens 19A24 protein (CRACC), mRNA  |
| NM_004654 | Homo sapiens ubiquitin specific protease 9, Y chromosome (fat facets-like Drosophila) (USP9Y), mRNA   |
| NM_018518 | Homo sapiens MCM10 minichromosome maintenance deficient 10 (S.  |

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|           | cerevisiae) (MCM10), mRNA  |
| NM_018593 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 10 (SLC16A10), mRNA   |
| NM_018240 | Homo sapiens kin of IRRE like (Drosophila) (KIRREL), mRNA  |
| NM_016004 | Homo sapiens chromosome 20 open reading frame 9 (C20orf9), mRNA  |
| NM_006841 | Homo sapiens solute carrier family 38, member 3 (SLC38A3), mRNA  |
| NM_003725 | Homo sapiens oxidative 3 alpha hydroxysteroid dehydrogenase; retinol dehydrogenase; 3-hydroxysteroid epimerase (RODH), mRNA  |
| NG_000009 | Homo sapiens genomic small histone family cluster (HFS@) on chromosome 6   |
| NM_080878 | Homo sapiens endothelial lectin HL-2 (HL-2), mRNA  |
| NM_080876 | Homo sapiens protein phosphatase (SKRP1), mRNA   |
| NM_080874 | Homo sapiens ankyrin repeat and SOCS box-containing 5 (ASB5), mRNA   |
| NM_080873 | Homo sapiens ankyrin repeat and SOCS box-containing 11 (ASB11), mRNA   |
| NM_080872 | Homo sapiens KIAA1777 protein (Unc5h4), mRNA   |
| NM_080867 | Homo sapiens suppressor of cytokine signalling 4 (SOCS4), mRNA   |
| NM_080864 | Homo sapiens relaxin 3 (H3) (RLN3), mRNA   |
| NM_080863 | Homo sapiens ankyrin repeat and SOCS box-containing 16 (ASB16), mRNA   |
| NM_080862 | Homo sapiens SPRY domain-containing SOCS box protein SSB-4 (SSB-4), mRNA   |
| NM_080861 | Homo sapiens SPRY domain-containing SOCS box protein SSB-3 (SSB-3), mRNA   |
| NM_080860 | Homo sapiens testes specific A2 homolog (mouse) (TSGA2), mRNA  |
| NM_016150 | Homo sapiens ankyrin repeat and SOCS box-containing 2 (ASB2), mRNA   |
| NM_016127 | Homo sapiens hypothetical protein MGC8721 (MGC8721), mRNA  |
| NM_004170 | Homo sapiens solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1 (SLC1A1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_017611 | Homo sapiens hypothetical protein DKFZp762A227 (DKFZp762A227), mRNA  |
| NM_025220 | Homo sapiens a disintegrin and metalloproteinase domain 33 (ADAM33), mRNA  |
| NM_018548 | Homo sapiens down-regulated in lung cancer (HLCDGP1), mRNA   |
| NM_080740 | Homo sapiens similar to Ovis aries Y chromosome repeat region OY11.1 (3'OY11.1), mRNA  |
| NM_012163 | Homo sapiens F-box and leucine-rich repeat protein 9 (FBXL9), mRNA   |
| NM_012304 | Homo sapiens F-box and leucine-rich repeat protein 7 (FBXL7), mRNA   |
| NM_012160 | Homo sapiens F-box and leucine-rich repeat protein 4 (FBXL4), mRNA   |
| NM_012159 | Homo sapiens F-box and leucine-rich repeat protein 3B (FBXL3B), mRNA   |
| NM_012158 | Homo sapiens F-box and leucine-rich repeat protein 3A (FBXL3A), mRNA   |
| NM_012157 | Homo sapiens F-box and leucine-rich repeat protein 2 (FBXL2), mRNA   |
| NM_024555 | Homo sapiens F-box and leucine-rich repeat protein 6 (FBXL6), transcript variant 2, mRNA   |
| NM_012162 | Homo sapiens F-box and leucine-rich repeat protein 6 (FBXL6), transcript variant 1, mRNA   |
| NM_033535 | Homo sapiens F-box and leucine-rich repeat protein 5 (FBXL5), transcript variant 2, mRNA   |
| NM_012161 | Homo sapiens F-box and leucine-rich repeat protein 5 (FBXL5), transcript variant 1, mRNA   |
| NM_002278 | Homo sapiens keratin, hair, acidic, 2 (KRTHA2), mRNA   |
| NM_033285 | Homo sapiens tumor protein p53 inducible nuclear protein 1 (TP53INP1), mRNA  |
| NM_002277 | Homo sapiens keratin, hair, acidic, 1 (KRTHA1), mRNA   |
| NM_032994 | Homo sapiens Williams Beuren syndrome chromosome region 14 (WBSCR14),  |

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|           | transcript variant 5, mRNA   |
| NM_032954 | Homo sapiens Williams Beuren syndrome chromosome region 14 (WBSCR14), transcript variant 4, mRNA   |
| NM_032953 | Homo sapiens Williams Beuren syndrome chromosome region 14 (WBSCR14), transcript variant 3, mRNA   |
| NM_032952 | Homo sapiens Williams Beuren syndrome chromosome region 14 (WBSCR14), transcript variant 2, mRNA   |
| NM_032951 | Homo sapiens Williams Beuren syndrome chromosome region 14 (WBSCR14), transcript variant 1, mRNA   |
| NG_000008 | Homo sapiens genomic cytochrome P450, subfamily IIA (phenobarbital-inducible) (CYP2A) on chromosome 19   |
| NM_030809 | Homo sapiens chromosome 12 open reading frame 22 (C12orf22), mRNA  |
| NM_004426 | Homo sapiens early development regulator 1 (polyhomeotic 1 homolog) (EDR1), mRNA   |
| NM_020244 | Homo sapiens choline phosphotransferase 1 (CHPT1), mRNA  |
| NM_019074 | Homo sapiens delta-like 4 (Drosophila) (DLL4), mRNA  |
| NM_018990 | Homo sapiens chromosome X open reading frame 9 (CXorf9), mRNA  |
| NM_017833 | Homo sapiens chromosome 21 open reading frame 55 (C21orf55), mRNA  |
| NM_018255 | Homo sapiens elongator protein 2 (ELP2), mRNA  |
| NM_014096 | Homo sapiens hypothetical protein DKFZp762A227 (DKFZp762A227), mRNA  |
| NM_014927 | Homo sapiens connector enhancer of KSR2 (CNK2), mRNA   |
| NM_012164 | Homo sapiens F-box and WD-40 domain protein 2 (FBXW2), mRNA  |
| NM_012247 | Homo sapiens selenium donor protein (SPS), mRNA  |
| NM_012165 | Homo sapiens F-box and WD-40 domain protein 3 (FBXW3), mRNA  |
| NM_007198 | Homo sapiens proline synthetase co-transcribed homolog (bacterial) (PROSC), mRNA   |
| NM_006011 | Homo sapiens sialyltransferase 8B (alpha-2, 8-sialyltransferase) (SIAT8B), mRNA  |
| NM_005674 | Homo sapiens zinc finger protein 239 (ZNF239), mRNA  |
| NM_001364 | Homo sapiens discs, large homolog 2, chapsyn-110 (Drosophila) (DLG2), mRNA   |
| NM_000646 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 6, mRNA |
| NM_000645 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 5, mRNA |
| NM_000644 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 2, mRNA |
| NM_000643 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 3, mRNA |
| NM_000642 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 1, mRNA |
| NM_000028 | Homo sapiens amylo-1, 6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), transcript variant 4, mRNA |
| NM_080831 | Homo sapiens chromosome 20 open reading frame 87 (C20orf87), mRNA  |
| NM_080825 | Homo sapiens chromosome 20 open reading frame 144 (C20orf144), mRNA  |
| NM_080823 | Homo sapiens chromosome 20 open reading frame 148 (C20orf148), mRNA  |

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| NM_017662 | Homo sapiens transient receptor potential cation channel, subfamily M, member 6 (TRPM6), mRNA                                      |
| NM_080744 | Homo sapiens scavenger receptor cysteine rich domain containing, group B (4 domains) (SRCRB4D), mRNA                               |
| NM_000493 | Homo sapiens collagen, type X, alpha 1(Schmid metaphyseal chondrodysplasia) (COL10A1), mRNA  |
| NM_057096 | Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43), transcript variant 3, mRNA  |
| NM_014578 | Homo sapiens ras homolog gene family, member D (ARHD), mRNA  |
| NM_020708 | Homo sapiens solute carrier family 12, (potassium-chloride transporter) member 5 (SLC12A5), mRNA                                   |
| NM_016093 | Homo sapiens ribosomal protein L26-like 1 (RPL26L1), mRNA  |
| NM_057095 | Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43), transcript variant 2, mRNA  |
| NM_022820 | Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43), transcript variant 1, mRNA  |
| NM_052969 | Homo sapiens ribosomal protein L39-like (RPL39L), mRNA   |
| NM_052970 | Homo sapiens chromosome 20 open reading frame 60 (C20orf60), mRNA  |
| NM_052865 | Homo sapiens chromosome 20 open reading frame 72 (C20orf72), mRNA  |
| NM_021029 | Homo sapiens ribosomal protein L36a (RPL36A), mRNA   |
| NM_001001 | Homo sapiens ribosomal protein L36a-like (RPL36AL), mRNA   |
| NM_033645 | Homo sapiens F-box and WD-40 domain protein 1B (FBXW1B), transcript variant 1, mRNA  |
| NM_033644 | Homo sapiens F-box and WD-40 domain protein 1B (FBXW1B), transcript variant 2, mRNA  |
| NM_012300 | Homo sapiens F-box and WD-40 domain protein 1B (FBXW1B), transcript variant 3, mRNA  |
| NM_022760 | Homo sapiens chromosome 20 open reading frame 81 (C20orf81), mRNA  |
| NM_014958 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 15 (ARHGEF15), mRNA  |
| NM_021810 | Homo sapiens cadherin-like 26 (CDH26), mRNA  |
| NM_030876 | Homo sapiens olfactory receptor, family 5, subfamily V, member 1 (OR5V1), mRNA   |
| NM_031232 | Homo sapiens amyloid beta (A4) precursor protein-binding, family A, member 2 binding protein (APBA2BP), transcript variant 2, mRNA |
| NM_031231 | Homo sapiens amyloid beta (A4) precursor protein-binding, family A, member 2 binding protein (APBA2BP), transcript variant 1, mRNA |
| NM_032554 | Homo sapiens G protein-coupled receptor 81 (GPR81), mRNA   |
| NM_006462 | Homo sapiens chromosome 20 open reading frame 18 (C20orf18), transcript variant 1, mRNA  |
| NM_031229 | Homo sapiens chromosome 20 open reading frame 18 (C20orf18), transcript variant 2, mRNA  |
| NM_031228 | Homo sapiens chromosome 20 open reading frame 18 (C20orf18), transcript variant 3, mRNA  |
| NM_031227 | Homo sapiens chromosome 20 open reading frame 18 (C20orf18), transcript variant 4, mRNA  |
| NM_031424 | Homo sapiens chromosome 20 open reading frame 55 (C20orf55), mRNA  |
| NM_000518 | Homo sapiens hemoglobin, beta (HBB), mRNA  |
| NM_030959 | Homo sapiens olfactory receptor, family 12, subfamily D, member 3 (OR12D3), mRNA   |
| NM_018661 | Homo sapiens defensin, beta 3 (DEFB3), mRNA  |
| NM_022487 | Homo sapiens DNA cross-link repair 1C (PSO2 homolog, S. cerevisiae)  |



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|           | (DCLRE1C), mRNA  |
| NM_022099 | Homo sapiens chromosome 20 open reading frame 51 (C20orf51), mRNA  |
| NM_000668 | Homo sapiens alcohol dehydrogenase 1B (class I), beta polypeptide (ADH1B), mRNA  |
| NM_021943 | Homo sapiens testis expressed sequence 27 (TEX27), mRNA  |
| NM_021640 | Homo sapiens chromosome 12 open reading frame 10 (C12orf10), mRNA  |
| NM_021215 | Homo sapiens chromosome 20 open reading frame 77 (C20orf77), mRNA  |
| NM_012141 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26 (DDX26), mRNA   |
| NM_021225 | Homo sapiens proline-rich 1 (PROL1), mRNA  |
| NM_006508 | Homo sapiens regenerating islet-derived-like, pancreatic stone protein-like, pancreatic thread protein-like (rat) (REGL), mRNA               |
| NM_020356 | Homo sapiens chromosome 20 open reading frame 32 (C20orf32), mRNA  |
| NM_020369 | Homo sapiens fascin homolog 3, actin-bundling protein, testicular (Strongylocentrotus purpuratus) (FSCN3), mRNA                              |
| NM_020145 | Homo sapiens SH3-domain GRB2-like endophilin B2 (SH3GLB2), mRNA  |
| NM_020125 | Homo sapiens BCM-like membrane protein precursor (BLAME), mRNA   |
| NM_019025 | Homo sapiens chromosome 20 open reading frame 16 (C20orf16), mRNA  |
| NM_018679 | Homo sapiens t-complex 11 (mouse) (TCP11), mRNA  |
| NM_017589 | Homo sapiens B-cell translocation gene 4 (BTG4), mRNA  |
| NM_018692 | Homo sapiens chromosome 20 open reading frame 17 (C20orf17), mRNA  |
| NM_018697 | Homo sapiens LanC lantibiotic synthetase component C-like 2 (bacterial) (LANCL2), mRNA   |
| NM_018677 | Homo sapiens acetyl-Coenzyme A synthetase 2 (ADP forming) (ACAS2), mRNA  |
| NM_018431 | Homo sapiens chromosome 20 open reading frame 180 (C20orf180), mRNA  |
| NM_018725 | Homo sapiens interleukin 17B receptor (IL17BR), mRNA   |
| NM_018474 | Homo sapiens chromosome 20 open reading frame 19 (C20orf19), mRNA  |
| NM_018478 | Homo sapiens chromosome 20 open reading frame 35 (C20orf35), mRNA  |
| NM_017896 | Homo sapiens chromosome 20 open reading frame 11 (C20orf11), mRNA  |
| NM_017874 | Homo sapiens chromosome 20 open reading frame 27 (C20orf27), mRNA  |
| NM_017859 | Homo sapiens uridine kinase-like 1 (URKL1), mRNA   |
| NM_017798 | Homo sapiens chromosome 20 open reading frame 21 (C20orf21), mRNA  |
| NM_017789 | Homo sapiens sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C (SEMA4C), mRNA |
| NM_017714 | Homo sapiens chromosome 20 open reading frame 13 (C20orf13), mRNA  |
| NM_017671 | Homo sapiens chromosome 20 open reading frame 42 (C20orf42), mRNA  |
| NM_018384 | Homo sapiens immune associated nucleotide 4 like 1 (mouse) (IAN4L1), mRNA  |
| NM_018354 | Homo sapiens chromosome 20 open reading frame 46 (C20orf46), mRNA  |
| NM_018347 | Homo sapiens chromosome 20 open reading frame 29 (C20orf29), mRNA  |
| NM_018327 | Homo sapiens chromosome 20 open reading frame 38 (C20orf38), mRNA  |
| NM_018282 | Homo sapiens paraspeckle protein 1 (PSP1), mRNA  |
| NM_018270 | Homo sapiens chromosome 20 open reading frame 20 (C20orf20), mRNA  |
| NM_018257 | Homo sapiens chromosome 20 open reading frame 36 (C20orf36), mRNA  |
| NM_018197 | Homo sapiens zinc finger protein 64 homolog (mouse) (ZFP64), mRNA  |
| NM_018010 | Homo sapiens estrogen-related receptor beta like 1 (ESRRBL1), mRNA   |
| NM_017446 | Homo sapiens mitochondrial ribosomal protein L39 (MRPL39), mRNA  |
| NM_017429 | Homo sapiens beta-carotene 15, 15'-dioxygenase (BCDO), mRNA  |
| NM_016082 | Homo sapiens chromosome 20 open reading frame 34 (C20orf34), mRNA  |
| NM_016610 | Homo sapiens toll-like receptor 8 (TLR8), mRNA   |
| NM_016009 | Homo sapiens SH3-domain GRB2-like endophilin B1 (SH3GLB1), mRNA  |

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| NM_016408 | Homo sapiens chromosome 20 open reading frame 34 (C20orf34), mRNA   |
| NM_016407 | Homo sapiens chromosome 20 open reading frame 43 (C20orf43), mRNA   |
| NM_016319 | Homo sapiens COP9 constitutive photomorphogenic homolog subunit 7A (Arabidopsis) (COPS7A), mRNA                             |
| NM_015985 | Homo sapiens angiopoietin 4 (ANGPT4), mRNA  |
| NM_015834 | Homo sapiens adenosine deaminase, RNA-specific, B1 (RED1 homolog rat) (ADARB1), transcript variant DRADA2c, mRNA            |
| NM_015833 | Homo sapiens adenosine deaminase, RNA-specific, B1 (RED1 homolog rat) (ADARB1), transcript variant DRABA2b, mRNA            |
| NM_014036 | Homo sapiens BCM-like membrane protein precursor (BLAME), mRNA  |
| NM_014012 | Homo sapiens RAS (RAD and GEM)-like GTP-binding (REM), mRNA   |
| NM_014841 | Homo sapiens synaptosomal-associated protein, 91 kD homolog (mouse) (SNAP91), mRNA  |
| NM_014795 | Homo sapiens zinc finger homeobox 1b (ZFHX1B), mRNA   |
| NM_015313 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 12 (ARHGEF12), mRNA   |
| NM_014784 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 11 (ARHGEF11), mRNA   |
| NM_014862 | Homo sapiens aryl-hydrocarbon receptor nuclear translocator 2 (ARNT2), mRNA   |
| NM_014054 | Homo sapiens chromosome 20 open reading frame 40 (C20orf40), mRNA   |
| NM_015629 | Homo sapiens PRP31 pre-mRNA processing factor 31 homolog (yeast) (PRPF31), mRNA   |
| NM_015417 | Homo sapiens chromosome 20 open reading frame 28 (C20orf28), mRNA   |
| NM_014625 | Homo sapiens nephrosis 2, idiopathic, steroid-resistant (podocin) (NPHS2), mRNA   |
| NM_014592 | Homo sapiens Kv channel interacting protein 1 (KCNIP1), mRNA  |
| NM_014140 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1 (SMARCA1), mRNA |
| NM_013442 | Homo sapiens stomatin (EPB72)-like 2 (STOML2), mRNA   |
| NM_013248 | Homo sapiens NUTF-like export factor1 (NXT1), mRNA  |
| NM_013316 | Homo sapiens CCR4-NOT transcription complex, subunit (CNOT4), mRNA  |
| NM_013348 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 14 (KCNJ14), mRNA                                   |
| NM_013279 | Homo sapiens chromosome 11 open reading frame 9 (C11orf9), mRNA   |
| NM_012418 | Homo sapiens fascin homolog 2, actin-bundling protein, retinal (Strongylocentrotus purpuratus) (FSCN2), mRNA                |
| NM_012201 | Homo sapiens golgi apparatus protein 1 (GLG1), mRNA   |
| NM_000519 | Homo sapiens hemoglobin, delta (HBD), mRNA  |
| NM_006999 | Homo sapiens polymerase (DNA directed) sigma (POLS), mRNA   |
| NM_006719 | Homo sapiens actin binding LIM protein (ABLIM), transcript variant ABLIM-m, mRNA  |
| NM_002313 | Homo sapiens actin binding LIM protein (ABLIM), transcript variant ABLIM-l, mRNA  |
| NM_007238 | Homo sapiens peroxisomal membrane protein 4 (24kD) (PXMP4), mRNA  |
| NM_007184 | Homo sapiens nischarin (NISCH), mRNA  |
| NM_006720 | Homo sapiens actin binding LIM protein (ABLIM), transcript variant ABLIM-s, mRNA  |
| NM_007026 | Homo sapiens dual specificity phosphatase 14 (DUSP14), mRNA   |
| NM_006837 | Homo sapiens COP9 constitutive photomorphogenic homolog subunit 5 (Arabidopsis) (COPS5), mRNA                               |
| NM_006614 | Homo sapiens cell adhesion molecule with homology to LICAM (close homolog   |

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|           | of L1) (CHL1), mRNA  |
| NM_006410 | Homo sapiens HIV-1 Tat interactive protein 2, 30 kD (HTATIP2), mRNA  |
| NM_006432 | Homo sapiens Niemann-Pick disease, type C2 (NPC2), mRNA  |
| NM_006348 | Homo sapiens golgi transport complex 1 (90 kD subunit) (GOLTC1), mRNA  |
| NM_006408 | Homo sapiens anterior gradient 2 homolog (Xenopus laevis) (AGR2), mRNA   |
| NM_006106 | Homo sapiens Yes-associated protein 1, 65 kD (YAP1), mRNA  |
| NM_006096 | Homo sapiens N-myc downstream regulated gene 1 (NDRG1), mRNA   |
| NM_006071 | Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly homolog, sea urchin)-like (PKDREJ), mRNA               |
| NM_006092 | Homo sapiens caspase recruitment domain family, member 4 (CARD4), mRNA   |
| NM_005748 | Homo sapiens YY1 associated factor 2 (YAF2), mRNA  |
| NM_005715 | Homo sapiens uronyl-2-sulfotransferase (UST), mRNA   |
| NM_005622 | Homo sapiens SA hypertension-associated homolog (rat) (SAH), mRNA  |
| NM_005733 | Homo sapiens RAB6 interacting, kinesin-like (rabkinesin6) (RAB6KIFL), mRNA   |
| NM_005668 | Homo sapiens sialyltransferase 8D (alpha-2, 8-polysialyltransferase) (SIAT8D), mRNA  |
| NM_005606 | Homo sapiens legumain (LGMN), mRNA   |
| NM_004649 | Homo sapiens chromosome 21 open reading frame 33 (C21orf33), mRNA  |
| NM_005469 | Homo sapiens peroxisomal acyl-CoA thioesterase (PTE1), mRNA  |
| NM_005180 | Homo sapiens B lymphoma Mo-MLV insertion region (mouse) (BM11), mRNA   |
| NM_005108 | Homo sapiens xylulokinase homolog (H. influenzae) (XYLB), mRNA   |
| NM_004610 | Homo sapiens t-complex 10 (mouse) (TCP10), mRNA  |
| NM_004579 | Homo sapiens mitogen-activated protein kinase kinase kinase 2 (MAP4K2), mRNA   |
| NM_004086 | Homo sapiens coagulation factor C homolog, cochlins (Limulus polyphemus) (COCH), mRNA  |
| NM_004273 | Homo sapiens carbohydrate (chondroitin 6) sulfotransferase 3 (CHST3), mRNA   |
| NM_004902 | Homo sapiens RNA-binding region (RNPI, RRM) containing 2 (RNPC2), mRNA   |
| NM_004353 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade H (heat shock protein 47), member 1, (collagen binding protein 1) (SERPINH1), mRNA |
| NM_004317 | Homo sapiens arsA arsenite transporter, ATP-binding, homolog 1 (bacterial) (ASNA1), mRNA   |
| NM_001247 | Homo sapiens ectonucleoside triphosphate diphosphohydrolase 6 (putative function) (ENTPD6), mRNA   |
| NM_003831 | Homo sapiens sudD suppressor of bimD6 homolog (A. nidulans) (SUDD), mRNA   |
| NM_003143 | Homo sapiens single-stranded DNA binding protein (SSBP1), mRNA   |
| NM_003098 | Homo sapiens syntrophin, alpha 1 (dystrophin-associated protein A1, 59kD, acidic component) (SNTA1), mRNA  |
| NM_003034 | Homo sapiens sialyltransferase 8A (alpha-N-acetylneuraminate/alpha-2,8-sialyltransferase, GD3 synthase) (SIAT8A), mRNA                           |
| NM_003028 | Homo sapiens SHB (Src homology 2 domain-containing) adaptor protein B (SHB), mRNA  |
| NM_003579 | Homo sapiens RAD54-like (S. cerevisiae) (RAD54L), mRNA   |
| NM_002669 | Homo sapiens pleiotropic regulator 1 (PRL1 homolog, Arabidopsis) (PLRG1), mRNA   |
| NM_000139 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 1 (MS4A2), mRNA  |
| NM_003836 | Homo sapiens delta-like 1 homolog (Drosophila) (DLK1), mRNA  |
| NM_003653 | Homo sapiens COP9 constitutive photomorphogenic homolog subunit 3  |

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|           | (Arabidopsis) (COPS3), mRNA  |
| NM_000083 | Homo sapiens chloride channel 1, skeletal muscle (Thomsen disease, autosomal dominant) (CLCN1), mRNA             |
| NM_000691 | Homo sapiens aldehyde dehydrogenase 3 family, member A1 (ALDH3A1), mRNA  |
| NM_001112 | Homo sapiens adenosine deaminase, RNA-specific, B1 (RED1 homolog rat) (ADARB1), transcript variant DRADA2a, mRNA |
| NM_004370 | Homo sapiens collagen, type XII, alpha 1 (COL12A1), transcript variant long, mRNA                                |
| NM_080645 | Homo sapiens collagen, type XII, alpha 1 (COL12A1), transcript variant short, mRNA                               |
| NM_080681 | Homo sapiens collagen, type XI, alpha 2 (COL11A2), transcript variant 2, mRNA                                    |
| NM_080680 | Homo sapiens collagen, type XI, alpha 2 (COL11A2), transcript variant 1, mRNA                                    |
| NM_080679 | Homo sapiens collagen, type XI, alpha 2 (COL11A2), transcript variant 3, mRNA                                    |
| NM_003593 | Homo sapiens winged-helix nude (WHN), mRNA   |
| NM_000638 | Homo sapiens vitronectin (serum spreading factor, somatomedin B, complement S-protein) (VTN), mRNA               |
| NM_080682 | Homo sapiens vascular cell adhesion molecule 1 (VCAM1), transcript variant 2, mRNA                               |
| NM_001078 | Homo sapiens vascular cell adhesion molecule 1 (VCAM1), transcript variant 1, mRNA                               |
| NM_006115 | Homo sapiens preferentially expressed antigen in melanoma (PRAME), mRNA  |
| NM_000175 | Homo sapiens glucose phosphate isomerase (GPI), mRNA   |
| NM_020526 | Homo sapiens EphA8 (EPHA8), mRNA   |
| NM_002109 | Homo sapiens histidyl-tRNA synthetase (HARS), mRNA   |
| NM_012208 | Homo sapiens histidyl-tRNA synthetase-like (HARSL), mRNA   |
| NM_004608 | Homo sapiens T-box 6 (TBX6), transcript variant 1, mRNA  |
| NM_080758 | Homo sapiens T-box 6 (TBX6), transcript variant 2, mRNA  |
| NM_080718 | Homo sapiens T-box 5 (TBX5), transcript variant 2, mRNA  |
| NM_080717 | Homo sapiens T-box 5 (TBX5), transcript variant 3, mRNA  |
| NM_000192 | Homo sapiens T-box 5 (TBX5), transcript variant 1, mRNA  |
| NM_080832 | Homo sapiens poly(A) binding protein, cytoplasmic 5 (PABPC5), mRNA   |
| NM_080824 | Homo sapiens chromosome 20 open reading frame 106 (C20orf106), mRNA  |
| NM_080822 | Homo sapiens candidate tumor suppressor OVCA2 (OVCA2), mRNA  |
| NM_080821 | Homo sapiens chromosome 20 open reading frame 108 (C20orf108), mRNA  |
| NM_080820 | Homo sapiens chromosome 20 open reading frame 88 (C20orf88), mRNA  |
| NM_080818 | Homo sapiens G protein-coupled receptor 80 (GPR80), mRNA   |
| NM_080817 | Homo sapiens G protein-coupled receptor 82 (GPR82), mRNA   |
| NM_080794 | Homo sapiens mitochondrial ribosomal protein L39 (MRPL39), mRNA  |
| NM_020973 | Homo sapiens cytosolic beta-glucosidase (GLUC), mRNA   |
| NM_054112 | Homo sapiens chromosome 20 open reading frame 63 (C20orf63), mRNA  |
| NM_052951 | Homo sapiens chromosome 20 open reading frame 167 (C20orf167), mRNA  |
| NM_014145 | Homo sapiens chromosome 20 open reading frame 30 (C20orf30), mRNA  |
| NM_033409 | Homo sapiens chromosome 20 open reading frame 54 (C20orf54), mRNA  |
| NM_032013 | Homo sapiens NDRG family member 3 (NDRG3), mRNA  |
| NM_032109 | Homo sapiens orthopedia homolog (Drosophila) (OTP), mRNA   |
| NM_024021 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 4 (MS4A4A), mRNA                                   |
| NM_022910 | Homo sapiens NDRG family member 4 (NDRG4), mRNA  |

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| NM_025206 | Homo sapiens fer-1-like 4 ( <i>C. elegans</i> ) (FER1L4), mRNA  |
| NM_024960 | Homo sapiens chromosome 20 open reading frame 48 (C20orf48), mRNA   |
| NM_024893 | Homo sapiens chromosome 20 open reading frame 39 (C20orf39), mRNA   |
| NM_024299 | Homo sapiens chromosome 20 open reading frame 149 (C20orf149), mRNA   |
| NM_024077 | Homo sapiens SECIS binding protein 2 (SBP2), mRNA   |
| NM_022730 | Homo sapiens COP9 constitutive photomorphogenic homolog subunit 7B ( <i>Arabidopsis</i> ) (COPS7B), mRNA  |
| NM_022574 | Homo sapiens postmeiotic segregation increased 2-like 12 (PERQ1), mRNA  |
| NM_022568 | Homo sapiens aldehyde dehydrogenase 8 family, member A1 (ALDH8A1), mRNA   |
| NM_022477 | Homo sapiens NDRG family member 3 (NDRG3), mRNA   |
| NM_022082 | Homo sapiens chromosome 20 open reading frame 59 (C20orf59), mRNA   |
| NM_022058 | Homo sapiens solute carrier family 4, sodium bicarbonate transporter-like, member 10 (SLC4A10), mRNA  |
| NM_021230 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia3 (MLL3), mRNA   |
| NM_021145 | Homo sapiens cyclin D binding myb-like transcription factor 1 (DMTF1), mRNA   |
| NM_005238 | Homo sapiens v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1), mRNA   |
| NM_020465 | Homo sapiens NDRG family member 4 (NDRG4), mRNA   |
| NM_014227 | Homo sapiens solute carrier family 5 (low affinity glucose cotransporter), member 4 (SLC5A4), mRNA  |
| NM_015317 | Homo sapiens pumilio homolog 2 ( <i>Drosophila</i> ) (PUM2), mRNA   |
| NM_015665 | Homo sapiens achalasia, adrenocortical insufficiency, alacrimia (Allgrove, triple-A) (AAAS), mRNA   |
| NM_021950 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 2 (Fc fragment of IgE, high affinity I, receptor for; beta polypeptide) (MS4A1), mRNA |
| NM_005589 | Homo sapiens aldehyde dehydrogenase 6 family, member A1 (ALDH6A1), mRNA   |
| NM_000533 | Homo sapiens proteolipid protein1 (Pelizaeus-Merzbacher disease, spastic paraplegia 2, uncomplicated) (PLP1), mRNA                                  |
| NM_016252 | Homo sapiens baculoviral IAP repeat-containing 6 (apollon) (BIRC6), mRNA  |
| NM_014351 | Homo sapiens sulfotransferase family 4A, member 1 (SULT4A1), mRNA   |
| NM_012323 | Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian) (MAFF), mRNA  |
| NM_006600 | Homo sapiens nuclear distribution gene C homolog ( <i>A. nidulans</i> ) (NUDC), mRNA  |
| NM_006145 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 1 (DNAJB1), mRNA   |
| NM_005120 | Homo sapiens trinucleotide repeat containing 11 (THR-associated protein, 230 kD subunit) (TNRC11), mRNA   |
| NM_001383 | Homo sapiens diphtheria toxin resistance protein required for diphthamide biosynthesis-like 1 ( <i>S. cerevisiae</i> ) (DPH2L1), mRNA               |
| NM_001327 | Homo sapiens cancer/testis antigen 1 (CTAG1), mRNA  |
| NM_080750 | Homo sapiens chromosome 20 open reading frame 143 (C20orf143), mRNA   |
| NM_032819 | Homo sapiens zinc finger protein 341 (ZNF341), mRNA   |
| NM_017895 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 27 (DDX27), mRNA  |
| NM_030782 | Homo sapiens cisplatin resistance related protein CRR9p (CRR9), mRNA  |
| NM_080748 | Homo sapiens chromosome 20 open reading frame 52 (C20orf52), mRNA   |
| NM_080743 | Homo sapiens serine-arginine repressor protein (35 kDa) (SRp35), mRNA   |
| NM_080742 | Homo sapiens UDP-glucuronyltransferase-S (GLCATS), mRNA   |

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| NM_080741 | Homo sapiens sialidase 4 (NEU4), mRNA   |
| NM_080739 | Homo sapiens chromosome 20 open reading frame 141 (C20orf141), mRNA   |
| NM_033550 | Homo sapiens chromosome 20 open reading frame 64 (C20orf64), mRNA   |
| NM_080732 | Homo sapiens egl nine homolog 2 (C. elegans) (EGLN2), transcript variant 3, mRNA  |
| NM_053046 | Homo sapiens egl nine homolog 2 (C. elegans) (EGLN2), transcript variant 1, mRNA  |
| NM_025106 | Homo sapiens SPRY domain-containing SOCS box protein SSB-1 (FLJ22393), mRNA   |
| NM_030760 | Homo sapiens endothelial differentiation, sphingolipid G-protein-coupled receptor, 8 (EDG8), mRNA   |
| NM_016069 | Homo sapiens mitochondria-associated protein involved in granulocyte-macrophage colony-stimulating factor signal transduction (Magmas), nuclear gene encoding mitochondrial protein, mRNA |
| NM_021205 | Homo sapiens Wnt-1 responsive Cdc42 homolog (WRCH-1), mRNA  |
| NM_032495 | Homo sapiens hypothetical protein SMAP31 (SMAP31), mRNA   |
| NM_032556 | Homo sapiens interleukin-1 HY2 (IL1HY2), mRNA   |
| NM_014331 | Homo sapiens solute carrier family 7, (cationic amino acid transporter, y+ system) member 11 (SLC7A11), mRNA  |
| NM_017564 | Homo sapiens stabilin-2 (STAB2), mRNA   |
| NM_020924 | Homo sapiens bioref (bioref), mRNA  |
| NM_015356 | Homo sapiens scribble (SCRIB), mRNA   |
| NM_030648 | Homo sapiens SET domain-containing protein 7 (SET7), mRNA   |
| NM_018488 | Homo sapiens T-box 4 (TBX4), mRNA   |
| NM_016470 | Homo sapiens chromosome 20 map 20q13.11   |
| NM_080722 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 14 (ADAMTS14), mRNA  |
| NM_080676 | Homo sapiens chromosome 20 open reading frame 133 (C20orf133), mRNA   |
| NM_080674 | Homo sapiens chromosome 20 open reading frame 86 (C20orf86), mRNA   |
| NM_080621 | Homo sapiens chromosome 20 open reading frame 136 (C20orf136), mRNA   |
| NM_080608 | Homo sapiens chromosome 20 open reading frame 165 (C20orf165), mRNA   |
| NM_080719 | Homo sapiens hypothetical protein MGC4473 (MGC4473), mRNA   |
| NM_003495 | Homo sapiens H4 histone family, member M (H4FM), mRNA   |
| NM_020633 | Homo sapiens VIR-like 1 (VIRL1), mRNA   |
| NM_007259 | Homo sapiens vacuolar protein sorting 45A (yeast) (VPS45A), mRNA  |
| NM_080631 | Homo sapiens vacuolar protein sorting 41 (yeast) (VPS41), transcript variant 2, mRNA  |
| NM_014396 | Homo sapiens vacuolar protein sorting 41 (yeast) (VPS41), transcript variant 1, mRNA  |
| NM_018668 | Homo sapiens vacuolar protein sorting 33B (yeast) (VPS33B), mRNA  |
| NM_022916 | Homo sapiens vacuolar protein sorting 33A (rat homolog) (VPS33A), mRNA  |
| NM_003610 | Homo sapiens RAE1 RNA export 1 homolog (S. pombe) (RAE1), mRNA  |
| NM_014061 | Homo sapiens APR-1 protein (MAGEH1), mRNA   |
| NM_001927 | Homo sapiens desmin (DES), mRNA   |
| NM_080593 | Homo sapiens histone family member (H2B/S), mRNA  |
| NM_080596 | Homo sapiens histone family member (H2A/S), mRNA  |
| NM_001867 | Homo sapiens cytochrome c oxidase subunit VIIc (COX7C), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001866 | Homo sapiens cytochrome c oxidase subunit VIIb (COX7B), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_004718 | Homo sapiens cytochrome c oxidase subunit VIIa polypeptide 2 like (COX7A2L), nuclear gene encoding mitochondrial protein, mRNA  |

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| NM_001865 | Homo sapiens cytochrome c oxidase subunit VIIa polypeptide 2 (liver) (COX7A2), nuclear gene encoding mitochondrial protein, mRNA                        |
| NM_001864 | Homo sapiens cytochrome c oxidase subunit VIIa polypeptide 1 (muscle) (COX7A1), nuclear gene encoding mitochondrial protein, mRNA                       |
| NM_006438 | Homo sapiens collectin sub-family member 10 (C-type lectin) (COLEC10), mRNA   |
| NM_080544 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant VIII, mRNA          |
| NM_080543 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant VII, mRNA           |
| NM_080542 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant VI, mRNA            |
| NM_080541 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant V, mRNA             |
| NM_080540 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant IV, mRNA            |
| NM_080539 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant III, mRNA           |
| NM_080538 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant II, mRNA            |
| NM_005677 | Homo sapiens collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase (COLQ), transcript variant I, mRNA             |
| NM_080592 | Homo sapiens apoptosis related protein APR-3 (APR-3), transcript variant 2, mRNA  |
| NM_016085 | Homo sapiens apoptosis related protein APR-3 (APR-3), transcript variant 1, mRNA  |
| NM_014318 | Homo sapiens apoptosis related protein (APR-2), mRNA  |
| NM_001745 | Homo sapiens calcium modulating ligand (CAMLG), mRNA  |
| NM_004341 | Homo sapiens carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase (CAD),, nuclear gene encoding mitochondrial protein, mRNA |
| NM_032493 | Homo sapiens adaptor-related protein complex 1, mu 1 subunit (AP1M1), mRNA  |
| NM_001128 | Homo sapiens adaptor-related protein complex 1, gamma 1 subunit (AP1G1), mRNA   |
| NM_080545 | Homo sapiens adaptor-related protein complex 1, gamma 2 subunit (AP1G2), transcript variant 2, mRNA   |
| NM_003917 | Homo sapiens adaptor-related protein complex 1, gamma 2 subunit (AP1G2), transcript variant 1, mRNA   |
| NM_080549 | Homo sapiens protein tyrosine phosphatase, non-receptor type 6 (PTPN6), transcript variant 3, mRNA  |
| NM_080548 | Homo sapiens protein tyrosine phosphatase, non-receptor type 6 (PTPN6), transcript variant 2, mRNA  |
| NM_002831 | Homo sapiens protein tyrosine phosphatase, non-receptor type 6 (PTPN6), transcript variant 1, mRNA  |
| NM_002830 | Homo sapiens protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte) (PTPN4), mRNA  |
| NM_002829 | Homo sapiens protein tyrosine phosphatase, non-receptor type 3 (PTPN3), mRNA  |
| NM_080423 | Homo sapiens protein tyrosine phosphatase, non-receptor type 2 (PTPN2), transcript variant 3, mRNA  |
| NM_080422 | Homo sapiens protein tyrosine phosphatase, non-receptor type 2 (PTPN2),   |

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|           | transcript variant 2, mRNA   |
| NM_002828 | Homo sapiens protein tyrosine phosphatase, non-receptor type 2 (PTPN2), transcript variant 1, mRNA                                     |
| NM_002827 | Homo sapiens protein tyrosine phosphatase, non-receptor type 1 (PTPN1), mRNA   |
| NM_014241 | Homo sapiens protein tyrosine phosphatase-like (proline instead of catalytic arginine), member a (PTPLA), mRNA                         |
| NM_003479 | Homo sapiens protein tyrosine phosphatase type IVA, member 2 (PTP4A2), transcript variant 1, mRNA                                      |
| NM_080392 | Homo sapiens protein tyrosine phosphatase type IVA, member 2 (PTP4A2), transcript variant 3, mRNA                                      |
| NM_080391 | Homo sapiens protein tyrosine phosphatase type IVA, member 2 (PTP4A2), transcript variant 2, mRNA                                      |
| NM_080591 | Homo sapiens prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1), transcript variant 2, mRNA |
| NM_000962 | Homo sapiens prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1), transcript variant 1, mRNA |
| NM_004058 | Homo sapiens calcyphosine (CAPS), transcript variant 1, mRNA   |
| NM_080590 | Homo sapiens calcyphosine (CAPS), transcript variant 2, mRNA   |
| NM_006380 | Homo sapiens amyloid beta precursor protein (cytoplasmic tail) binding protein 2 (APPBP2), mRNA  |
| NM_003905 | Homo sapiens amyloid beta precursor protein binding protein 1, 59kD (APPBP1), mRNA   |
| NM_005783 | Homo sapiens ATP binding protein associated with cell differentiation (APACD), mRNA  |
| NM_080600 | Homo sapiens myelin associated glycoprotein (MAG), transcript variant 2, mRNA  |
| NM_002361 | Homo sapiens myelin associated glycoprotein (MAG), transcript variant 1, mRNA  |
| NM_005994 | Homo sapiens T-box 2 (TBX2), mRNA  |
| NM_080647 | Homo sapiens T-box 1 (TBX1), transcript variant C, mRNA  |
| NM_080646 | Homo sapiens T-box 1 (TBX1), transcript variant A, mRNA  |
| NM_080675 | Homo sapiens sperm associated antigen 4-like (SPAG4L), mRNA  |
| NM_080617 | Homo sapiens cerebellin precursor-like 1 (CBLNL1), mRNA  |
| NM_080611 | Homo sapiens dual specificity phosphatase-like 15 (DUSP15), mRNA   |
| NM_080610 | Homo sapiens cystatin 9-like (mouse) (CST9L), mRNA   |
| NM_080602 | Homo sapiens actin related protein 2/3 complex, subunit 3B (21 kD) (ARPC3B), mRNA  |
| NG_000011 | Homo sapiens genomic cytochrome P450, subfamily IIA (phenobarbital-inducible) (CYP2A.3@) on chromosome 19                              |
| NM_016649 | Homo sapiens chromosome 20 open reading frame 6 (C20orf6), mRNA  |
| NM_080597 | Homo sapiens oxysterol binding protein-like 1A (OSBPL1A), mRNA   |
| NM_080605 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 6 (B3GALT6), mRNA  |
| NM_058169 | Homo sapiens loss of heterozygosity, 12, chromosomal region 1 (LOH12CR1), mRNA   |
| NM_058164 | Homo sapiens olfactomedin 2 (OLFM2), mRNA  |
| NM_052866 | Homo sapiens ADAMTS-like 1 (ADAMTSL1), mRNA  |
| NM_018030 | Homo sapiens oxysterol binding protein-like 1A (OSBPL1A), mRNA   |
| NM_033142 | Homo sapiens chorionic gonadotropin, beta polypeptide 7 (CGB7), mRNA   |
| NG_000013 | Homo sapiens genomic MHC class III complement gene cluster (MCGC@) on chromosome 6   |



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| NM_020967 | Homo sapiens nuclear receptor coactivator 5 (NCOA5), mRNA  |
| NM_033044 | Homo sapiens microtubule-actin crosslinking factor 1 (MACF1), transcript variant 3, mRNA                       |
| NM_033024 | Homo sapiens microtubule-actin crosslinking factor 1 (MACF1), transcript variant 2, mRNA                       |
| NG_000017 | Homo sapiens genomic protocadherin beta cluster (PCDHB@) on chromosome 5                                       |
| NM_015864 | Homo sapiens chromosome 6 open reading frame 32 (C6orf32), mRNA  |
| NM_032188 | Homo sapiens histone acetyltransferase MYST1 (MYST1), mRNA   |
| NM_030776 | Homo sapiens chromosome 20 open reading frame 183 (C20orf183), mRNA  |
| NM_024918 | Homo sapiens chromosome 20 open reading frame 172 (C20orf172), mRNA  |
| NM_024812 | Homo sapiens brain and acute leukemia, cytoplasmic (BAALC), mRNA   |
| NM_024777 | Homo sapiens chromosome 20 open reading frame 124 (C20orf124), mRNA  |
| NM_024758 | Homo sapiens agmatinase (FLJ23384), mRNA   |
| NM_024641 | Homo sapiens mandaselin (FLJ12838), mRNA   |
| NM_024331 | Homo sapiens chromosome 20 open reading frame 121 (C20orf121), mRNA  |
| NM_024301 | Homo sapiens fukutin-related protein (FKRP), mRNA  |
| NM_005763 | Homo sapiens aminoadipate-semialdehyde synthase (AASS), mRNA   |
| NM_023935 | Homo sapiens chromosome 20 open reading frame 116 (C20orf116), mRNA  |
| NM_021993 | Homo sapiens FUS interacting protein (serine-arginine rich) 2 (FUSIP2), mRNA                                   |
| NM_014555 | Homo sapiens transient receptor potential cation channel, subfamily M, member 5 (TRPM5), mRNA                  |
| NM_000537 | Homo sapiens renin (REN), mRNA   |
| NM_016652 | Homo sapiens Crn, crooked neck-like 1 (Drosophila) (CRNKL1), mRNA  |
| NM_021245 | Homo sapiens myozenin 1 (MYOZ1), mRNA  |
| NM_001967 | Homo sapiens eukaryotic translation initiation factor 4A, isoform 2 (EIF4A2), mRNA                             |
| NM_018649 | Homo sapiens H2A histone family, member Y2 (H2AFY2), mRNA  |
| NM_015148 | Homo sapiens PAS domain containing serine/threonine kinase (PASK), mRNA  |
| NM_017902 | Homo sapiens hypoxia-inducible factor 1, alpha subunit inhibitor (HIF1AN), mRNA                                |
| NM_018285 | Homo sapiens chromosome 15 open reading frame 12 (C15orf12), nuclear gene encoding mitochondrial protein, mRNA |
| NM_018267 | Homo sapiens H2A histone family, member J (H2AFJ), mRNA  |
| NM_017555 | Homo sapiens egl nine homolog 2 (C. elegans) (EGLN2), transcript variant 2, mRNA                               |
| NM_016143 | Homo sapiens likely ortholog of rat p47 (p47), mRNA  |
| NM_015993 | Homo sapiens plasmalipin (PMLP), mRNA  |
| NM_014938 | Homo sapiens Mlx interactor (MONDOA), mRNA   |
| NM_014948 | Homo sapiens likely ortholog of mouse ubiquitin conjugating enzyme 7 interacting protein 5 (UBCE7IP5), mRNA    |
| NM_014016 | Homo sapiens SAC1 suppressor of actin mutations 1-like (yeast) (SACM1L), mRNA                                  |
| NM_015156 | Homo sapiens REST corepressor (RCOR), mRNA   |
| NM_013337 | Homo sapiens translocase of inner mitochondrial membrane 22 homolog (yeast) (TIMM22), mRNA                     |
| NM_013233 | Homo sapiens serine threonine kinase 39 (STE20/SPS1 homolog, yeast) (STK39), mRNA                              |
| NM_006595 | Homo sapiens apoptosis inhibitor 5 (API5), mRNA  |
| NM_006402 | Homo sapiens hepatitis B virus x interacting protein (HBXIP), mRNA   |
| NM_006351 | Homo sapiens translocase of inner mitochondrial membrane 44 homolog (yeast) (TIMM44), mRNA                     |
| NM_006327 | Homo sapiens translocase of inner mitochondrial membrane 23 homolog (yeast)                                    |

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|           | (TIMM23), mRNA  |
| NM_006335 | Homo sapiens translocase of inner mitochondrial membrane 17 homolog A (yeast) (TIMM17A), mRNA                     |
| NM_006420 | Homo sapiens ADP-ribosylation factor guanine nucleotide-exchange factor 2 (brefeldin A-inhibited) (ARFGEF2), mRNA |
| NM_005992 | Homo sapiens T-box 1 (TBX1), transcript variant B, mRNA   |
| NM_005834 | Homo sapiens translocase of inner mitochondrial membrane 17 homolog B (yeast) (TIMM17B), mRNA                     |
| NM_000385 | Homo sapiens aquaporin 1 (channel-forming integral protein, 28kD) (AQP1), mRNA                                    |
| NM_002891 | Homo sapiens Ras protein-specific guanine nucleotide-releasing factor 1 (RASGRF1), mRNA                           |
| NM_000963 | Homo sapiens prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (PTGS2), mRNA  |
| NM_002792 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7), mRNA                                 |
| NM_002335 | Homo sapiens low density lipoprotein receptor-related protein 5 (LRP5), mRNA                                      |
| NM_001402 | Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1), mRNA                                    |
| NM_080677 | Homo sapiens dynein light chain 2 (Dlc2), mRNA  |
| NM_080672 | Homo sapiens Q9H4T4 like (H17739), mRNA   |
| NM_080671 | Homo sapiens potassium voltage-gated channel, Isk-related subfamily, gene 4 (KCNE4), mRNA                         |
| NM_080670 | Homo sapiens similar to RIKEN cDNA 2610030J16 gene (MGC2541), mRNA  |
| NM_080669 | Homo sapiens similar to RIKEN cDNA 1110002C08 gene (MGC9564), mRNA  |
| NM_080667 | Homo sapiens similar to RIKEN cDNA 4931428D14 gene (MGC15407), mRNA   |
| NM_080665 | Homo sapiens similar to RIKEN cDNA B230118G17 gene (MGC19604), mRNA   |
| NM_080664 | Homo sapiens similar to RIKEN cDNA 4930578F06 gene (MGC9912), mRNA  |
| NM_080662 | Homo sapiens similar to RIKEN cDNA 1810022F11 gene (MGC4281), mRNA  |
| NM_080660 | Homo sapiens similar to RIKEN cDNA 1200014N16 gene (MGC14289), mRNA   |
| NM_080659 | Homo sapiens similar to RIKEN cDNA 2310030G06 gene (MGC14839), mRNA   |
| NM_080657 | Homo sapiens vipirin (cig5), mRNA   |
| NM_080655 | Homo sapiens similar to RIKEN cDNA 5730528L13 gene (MGC17337), mRNA   |
| NM_080654 | Homo sapiens NY-REN-41 antigen (NY-REN-41), mRNA  |
| NM_080653 | Homo sapiens similar to RIKEN cDNA 4930500C14 gene (MGC9341), mRNA  |
| NM_080652 | Homo sapiens similar to RIKEN cDNA 5730578N08 gene (MGC15397), mRNA   |
| NM_004296 | Homo sapiens regulator of G-protein signalling 6 (RGS6), mRNA   |
| NM_014234 | Homo sapiens FabG (beta-ketoacyl-[acyl-carrier-protein] reductase, E coli) like (E. coli) (FABGL), mRNA           |
| NM_024775 | Homo sapiens gemin 6 (GEMIN6), mRNA   |
| NM_080626 | Homo sapiens BRI3 binding protein (BRI3BP), mRNA  |
| NM_080625 | Homo sapiens chromosome 20 open reading frame 160 (C20orf160), mRNA   |
| NM_080616 | Homo sapiens chromosome 20 open reading frame 112 (C20orf112), mRNA   |
| NM_080612 | Homo sapiens DOS/Gab family member 3 (GAB3), mRNA   |
| NM_080607 | Homo sapiens chromosome 20 open reading frame 102 (C20orf102), mRNA   |
| NM_080603 | Homo sapiens chromosome 20 open reading frame 162 (C20orf162), mRNA   |
| NM_032019 | Homo sapiens histone deacetylase 10 (HDAC10), mRNA  |
| NM_030815 | Homo sapiens chromosome 20 open reading frame 126 (C20orf126), mRNA   |
| NM_020841 | Homo sapiens oxysterol binding protein-like 8 (OSBPL8), mRNA  |
| NM_020764 | Homo sapiens casp-1 interacting protein 1 (CASKIN1), mRNA   |
| NM_016436 | Homo sapiens chromosome 20 open reading frame 104 (C20orf104), mRNA   |

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| NM_022104 | Homo sapiens chromosome 20 open reading frame 67 (C20orf67), mRNA  |
| NM_080546 | Homo sapiens CDw92 antigen (CDW92), mRNA   |
| NM_015511 | Homo sapiens chromosome 20 open reading frame 4 (C20orf4), mRNA  |
| NM_002116 | Homo sapiens major histocompatibility complex, class I, A (HLA-A), mRNA  |
| NM_023017 | Homo sapiens phosphoinositide 3-kinase enhancer (PIKE), mRNA   |
| NM_020933 | Homo sapiens zinc finger protein 317 (ZNF317), mRNA  |
| NM_005037 | Homo sapiens peroxisome proliferative activated receptor, gamma (PPARG), mRNA  |
| NM_018206 | Homo sapiens vacuolar protein sorting 35 (yeast) (VPS35), mRNA   |
| NM_014003 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 38 (DDX38), mRNA   |
| NM_006445 | Homo sapiens PRP8 pre-mRNA processing factor 8 homolog (yeast) (PRPF8), mRNA   |
| NM_003675 | Homo sapiens pre-mRNA processing factor 18 (PRP18), mRNA   |
| NM_006214 | Homo sapiens phytanoyl-CoA hydroxylase (Refsum disease) (PHYH), mRNA   |
| NM_004374 | Homo sapiens cytochrome c oxidase subunit VIc (COX6C), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001863 | Homo sapiens cytochrome c oxidase subunit VIb (COX6B), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_005205 | Homo sapiens cytochrome c oxidase subunit VIa polypeptide 2 (COX6A2), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_004373 | Homo sapiens cytochrome c oxidase subunit VIa polypeptide 1 (COX6A1), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_032609 | Homo sapiens cytochrome c oxidase subunit IV isoform 2 (COX4I2), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_032489 | Homo sapiens acrosin binding protein (ACRBP), mRNA   |
| NM_080476 | Homo sapiens CDC91 cell division cycle 91-like 1 (S. cerevisiae) (CDC91L1), mRNA   |
| NM_080473 | Homo sapiens GATA binding protein 5 (GATA5), mRNA  |
| NM_002121 | Homo sapiens major histocompatibility complex, class II, DP beta 1 (HLA-DPB1), mRNA  |
| NM_078470 | Homo sapiens COX15 homolog, cytochrome c oxidase assembly protein (yeast) (COX15), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA       |
| NM_004375 | Homo sapiens COX11 homolog, cytochrome c oxidase assembly protein (yeast) (COX11), nuclear gene encoding mitochondrial protein, mRNA                             |
| NM_001303 | Homo sapiens COX10 homolog, cytochrome c oxidase assembly protein, heme A/farnesyltransferase (yeast) (COX10), nuclear gene encoding mitochondrial protein, mRNA |
| NM_054028 | Homo sapiens acyl-malonyl condensing enzyme (AMAC), mRNA   |
| NM_032485 | Homo sapiens chromosome 20 open reading frame 154 (C20orf154), mRNA  |
| NM_033342 | Homo sapiens tripartite motif-containing 7 (TRIM7), mRNA   |
| NM_033421 | Homo sapiens chromosome 20 open reading frame 161 (C20orf161), mRNA  |
| NM_033197 | Homo sapiens chromosome 20 open reading frame 114 (C20orf114), mRNA  |
| NM_020866 | Homo sapiens kelch-like 1 (Drosophila) (KLHL1), mRNA   |
| NM_032883 | Homo sapiens chromosome 20 open reading frame 100 (C20orf100), mRNA  |
| NM_032523 | Homo sapiens oxysterol binding protein-like 6 (OSBPL6), mRNA   |
| NM_020896 | Homo sapiens oxysterol binding protein-like 5 (OSBPL5), mRNA   |
| NM_015550 | Homo sapiens oxysterol binding protein-like 3 (OSBPL3), mRNA   |
| NM_031473 | Homo sapiens carnitine deficiency-associated gene expressed in ventricle 1 (CDV-1), mRNA   |
| NM_030801 | Homo sapiens MAGE-E1 protein (MAGE-E1), mRNA   |

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| NM_025128 | Homo sapiens MUS81 endonuclease (MUS81), mRNA  |
| NM_024958 | Homo sapiens chromosome 20 open reading frame 98 (C20orf98), mRNA  |
| NM_024663 | Homo sapiens aminopeptidase-like 1 (NPEPL1), mRNA  |
| NM_024586 | Homo sapiens oxysterol binding protein-like 9 (OSBPL9), mRNA   |
| NM_024120 | Homo sapiens chromosome 20 open reading frame 7 (C20orf7), mRNA  |
| NM_022776 | Homo sapiens oxysterol binding protein-like 11 (OSBPL11), mRNA   |
| NM_022109 | Homo sapiens CDw92 antigen (CDW92), mRNA   |
| NM_022088 | Homo sapiens zinc finger protein 338 (ZNF338), mRNA  |
| NM_021158 | Homo sapiens chromosome 20 open reading frame 97 (C20orf97), mRNA  |
| NM_021232 | Homo sapiens proline dehydrogenase (oxidase) 2 (PRODH2), mRNA  |
| NM_021220 | Homo sapiens zinc finger protein 339 (ZNF339), mRNA  |
| NM_021039 | Homo sapiens S100 calcium binding protein A14 (calgizzarin) (S100A14), mRNA                              |
| NM_020659 | Homo sapiens tweety homolog 1 (Drosophila) (TTYH1), mRNA   |
| NM_018972 | Homo sapiens ganglioside-induced differentiation-associated protein 1 (GDAP1), mRNA                      |
| NM_017921 | Homo sapiens hypothetical protein FLJ20657 (NPL4), mRNA  |
| NM_017784 | Homo sapiens oxysterol binding protein-like 10 (OSBPL10), mRNA   |
| NM_017731 | Homo sapiens oxysterol binding protein-like 7 (OSBPL7), mRNA   |
| NM_018209 | Homo sapiens ADP-ribosylation factor 1 GTPase activating protein (ARF1GAP), mRNA                         |
| NM_018102 | Homo sapiens zinc finger protein 334 (ZNF334), mRNA  |
| NM_015891 | Homo sapiens pre-mRNA splicing factor 17 (PRP17), mRNA   |
| NM_016599 | Homo sapiens myozenin 2 (MYOZ2), mRNA  |
| NM_014962 | Homo sapiens BTB (POZ) domain containing 3 (BTBD3), mRNA   |
| NM_014835 | Homo sapiens oxysterol binding protein-like 2 (OSBPL2), mRNA   |
| NM_014723 | Homo sapiens syntaphilin (SNPH), mRNA  |
| NM_014183 | Homo sapiens dynein light chain 2A (DNLC2A), mRNA  |
| NM_014055 | Homo sapiens carnitine deficiency-associated gene expressed in ventricle 1 (CDV-1), mRNA                 |
| NM_014477 | Homo sapiens chromosome 20 open reading frame 10 (C20orf10), mRNA  |
| NM_012261 | Homo sapiens chromosome 20 open reading frame 103 (C20orf103), mRNA                                      |
| NM_013369 | Homo sapiens DNA (cytosine-5-)-methyltransferase 3-like (DNMT3L), mRNA                                   |
| NM_012469 | Homo sapiens chromosome 20 open reading frame 14 (C20orf14), mRNA  |
| NM_012291 | Homo sapiens extra spindle poles like 1 (S. cerevisiae) (ESPL1), mRNA                                    |
| NM_007002 | Homo sapiens adhesion regulating molecule 1 (ADRM1), mRNA  |
| NM_006809 | Homo sapiens translocase of outer mitochondrial membrane 34 (TOMM34), mRNA                               |
| NM_006813 | Homo sapiens proline rich 2 (PROL2), mRNA  |
| NM_002509 | Homo sapiens NK2 transcription factor homolog B (Drosophila) (NKX2B), mRNA                               |
| NM_080474 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 12 (SERPINB12), mRNA |
| NM_006009 | Homo sapiens tubulin, alpha 3 (TUBA3), mRNA  |
| NM_003463 | Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1), mRNA                              |
| NM_019888 | Homo sapiens melanocortin 3 receptor (MC3R), mRNA  |
| NM_001846 | Homo sapiens collagen, type IV, alpha 2 (COL4A2), mRNA   |
| NM_079422 | Homo sapiens myosin, light polypeptide 1, alkali; skeletal, fast (MYL1), transcript variant 3f, mRNA     |
| NM_079420 | Homo sapiens myosin, light polypeptide 1, alkali; skeletal, fast (MYL1), transcript variant 1f, mRNA     |

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| NM_000795 | Homo sapiens dopamine receptor D2 (DRD2), transcript variant 1, mRNA  |
| NM_016574 | Homo sapiens dopamine receptor D2 (DRD2), transcript variant 2, mRNA  |
| NM_079837 | Homo sapiens BTG3 associated nuclear protein (BANP), transcript variant 2, mRNA   |
| NM_017869 | Homo sapiens BTG3 associated nuclear protein (BANP), transcript variant 1, mRNA   |
| NM_079425 | Homo sapiens myosin, light polypeptide 6, alkali, smooth muscle and non-muscle (MYL6), transcript variant 3, mRNA                         |
| NM_079424 | Homo sapiens myosin, light polypeptide 6, alkali, smooth muscle and non-muscle (MYL6), transcript variant 4, mRNA                         |
| NM_079423 | Homo sapiens myosin, light polypeptide 6, alkali, smooth muscle and non-muscle (MYL6), transcript variant 2, mRNA                         |
| NM_021019 | Homo sapiens myosin, light polypeptide 6, alkali, smooth muscle and non-muscle (MYL6), transcript variant 1, mRNA                         |
| NM_004509 | Homo sapiens SP110 nuclear body protein (SP110), transcript variant a, mRNA   |
| NM_080424 | Homo sapiens SP110 nuclear body protein (SP110), transcript variant c, mRNA   |
| NM_004510 | Homo sapiens SP110 nuclear body protein (SP110), transcript variant b, mRNA   |
| NM_004574 | Homo sapiens peanut-like 2 (Drosophila) (PNUTL2), transcript variant 1, mRNA  |
| NM_080417 | Homo sapiens peanut-like 2 (Drosophila) (PNUTL2), transcript variant 4, mRNA  |
| NM_080416 | Homo sapiens peanut-like 2 (Drosophila) (PNUTL2), transcript variant 3, mRNA  |
| NM_080415 | Homo sapiens peanut-like 2 (Drosophila) (PNUTL2), transcript variant 2, mRNA  |
| NM_002117 | Homo sapiens major histocompatibility complex, class I, C (HLA-C), mRNA   |
| NM_005514 | Homo sapiens major histocompatibility complex, class I, B (HLA-B), mRNA   |
| NC_001807 | Homo sapiens mitochondrion, complete genome   |
| NM_080489 | Homo sapiens syndecan binding protein (syntenin) 2 (SDCBP2), mRNA   |
| NM_001997 | Homo sapiens Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV) ubiquitously expressed (fox derived); ribosomal protein S30 (FAU), mRNA |
| NM_057179 | Homo sapiens likely ortholog of mouse and rat twist-related bHLH protein Dermo-1 (DERMO1), mRNA   |
| NM_001008 | Homo sapiens ribosomal protein S4, Y-linked (RPS4Y), mRNA   |
| NM_001007 | Homo sapiens ribosomal protein S4, X-linked (RPS4X), mRNA   |
| NM_005192 | Homo sapiens cyclin-dependent kinase inhibitor 3 (CDK2-associated dual specificity phosphatase) (CDKN3), mRNA                             |
| NM_079421 | Homo sapiens cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) (CDKN2D), transcript variant 2, mRNA                               |
| NM_001800 | Homo sapiens cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) (CDKN2D), transcript variant 1, mRNA                               |
| NM_078626 | Homo sapiens cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4) (CDKN2C), transcript variant 2, mRNA                               |
| NM_001262 | Homo sapiens cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4) (CDKN2C), transcript variant 1, mRNA                               |
| NM_078487 | Homo sapiens cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 2, mRNA                               |
| NM_004936 | Homo sapiens cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 1, mRNA                               |
| NM_004896 | Homo sapiens vacuolar protein sorting 26 (yeast) (VPS26), mRNA  |
| NM_052945 | Homo sapiens BAFF receptor (BAFFR), mRNA  |
| NM_022648 | Homo sapiens tensin (TNS), mRNA   |
| NM_078480 | Homo sapiens fuse-binding protein-interacting repressor (SIAHBP1), transcript variant 1, mRNA   |
| NM_014281 | Homo sapiens fuse-binding protein-interacting repressor (SIAHBP1), transcript variant 2, mRNA   |

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| NM_004740 | Homo sapiens TGFB1-induced anti-apoptotic factor 1 (TIAF1), transcript variant 2, mRNA                    |
| NM_078471 | Homo sapiens TGFB1-induced anti-apoptotic factor 1 (TIAF1), transcript variant 1, mRNA                    |
| NM_001852 | Homo sapiens collagen, type IX, alpha 2 (COL9A2), mRNA  |
| NM_078485 | Homo sapiens collagen, type IX, alpha 1 (COL9A1), transcript variant 2, mRNA                              |
| NM_001851 | Homo sapiens collagen, type IX, alpha 1 (COL9A1), transcript variant 1, mRNA                              |
| NM_054026 | Homo sapiens CCR4-NOT transcription complex, subunit 7 (CNOT7), transcript variant 2, mRNA                |
| NM_013354 | Homo sapiens CCR4-NOT transcription complex, subunit 7 (CNOT7), transcript variant 1, mRNA                |
| NM_004064 | Homo sapiens cyclin-dependent kinase inhibitor 1B (p27, Kip1) (CDKN1B), mRNA                              |
| NM_000389 | Homo sapiens cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A), transcript variant 1, mRNA        |
| NM_078467 | Homo sapiens cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A), transcript variant 2, mRNA        |
| NM_003936 | Homo sapiens cyclin-dependent kinase 5, regulatory subunit 2 (p39) (CDK5R2), mRNA                         |
| NM_004642 | Homo sapiens CDK2-associated protein 1 (CDK2AP1), mRNA  |
| NM_078481 | Homo sapiens CD97 antigen (CD97), transcript variant 1, mRNA  |
| NM_001784 | Homo sapiens CD97 antigen (CD97), transcript variant 2, mRNA  |
| NM_080432 | Homo sapiens vacuolar protein sorting protein 18 (VPS18), transcript variant 2, mRNA                      |
| NM_020857 | Homo sapiens vacuolar protein sorting protein 18 (VPS18), transcript variant 1, mRNA                      |
| NM_080414 | Homo sapiens vacuolar protein sorting 16 (yeast) (VPS16), transcript variant 2, mRNA                      |
| NM_080413 | Homo sapiens vacuolar protein sorting 16 (yeast) (VPS16), transcript variant 3, mRNA                      |
| NM_022575 | Homo sapiens vacuolar protein sorting 16 (yeast) (VPS16), transcript variant 1, mRNA                      |
| NM_021729 | Homo sapiens vacuolar protein sorting 11 (yeast) (VPS11), mRNA  |
| NM_005806 | Homo sapiens oligodendrocyte lineage transcription factor 2 (OLIG2), mRNA                                 |
| NM_012106 | Homo sapiens binder of Arl Two (BART1), mRNA  |
| NM_006095 | Homo sapiens ATPase, aminophospholipid transporter (APLT), Class I, type 8A, member 1 (ATP8A1), mRNA      |
| NM_058241 | Homo sapiens cyclin T2 (CCNT2), transcript variant b, mRNA  |
| NM_001241 | Homo sapiens cyclin T2 (CCNT2), transcript variant a, mRNA  |
| NM_001240 | Homo sapiens cyclin T1 (CCNT1), mRNA  |
| NM_000474 | Homo sapiens twist homolog (acrocephalosyndactyly 3; Saethre-Chotzen syndrome) (Drosophila) (TWIST), mRNA |
| NM_080475 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 11 (SERPINB11), mRNA  |
| NM_021209 | Homo sapiens caspase recruitment domain protein 12 (CARD12), mRNA   |
| NM_014550 | Homo sapiens caspase recruitment domain protein 10 (CARD10), mRNA   |
| NM_012287 | Homo sapiens centaurin, beta 2 (CENTB2), mRNA   |
| NM_007049 | Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), transcript variant 1, mRNA                    |
| NM_078476 | Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), transcript variant 2, mRNA                    |
| NM_004444 | Homo sapiens EphB4 (EPHB4), mRNA  |

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| NM_004443 | Homo sapiens EphB3 (EPHB3), mRNA   |
| NM_004442 | Homo sapiens EphB2 (EPHB2), transcript variant 1, mRNA   |
| NM_017449 | Homo sapiens EphB2 (EPHB2), transcript variant 2, mRNA   |
| NM_004535 | Homo sapiens myelin transcription factor 1 (MYT1), mRNA  |
| NM_006800 | Homo sapiens male-specific lethal 3-like 1 (Drosophila) (MSL3L1), transcript variant 3, mRNA   |
| NM_078630 | Homo sapiens male-specific lethal 3-like 1 (Drosophila) (MSL3L1), transcript variant 2, mRNA   |
| NM_078629 | Homo sapiens male-specific lethal 3-like 1 (Drosophila) (MSL3L1), transcript variant 1, mRNA   |
| NM_078628 | Homo sapiens male-specific lethal 3-like 1 (Drosophila) (MSL3L1), transcript variant 4, mRNA   |
| NM_080431 | Homo sapiens actin related protein M2 (ARPM2), mRNA  |
| NM_080430 | Homo sapiens selenoprotein SelM (SELM), mRNA   |
| NM_052944 | Homo sapiens putative sodium-coupled cotransporter RKST1 (RKST1), mRNA   |
| NM_024831 | Homo sapiens nuclear receptor coactivator 6 interacting protein (NCOA6IP), mRNA  |
| NM_032803 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 3 (SLC7A3), mRNA   |
| NM_080385 | Homo sapiens carboxypeptidase A5 (CPA5), mRNA  |
| NM_016476 | Homo sapiens APC11 anaphase promoting complex subunit 11 homolog (yeast) (ANAPC11), mRNA   |
| NM_080389 | Homo sapiens defensin, beta 4 (DEFB4), mRNA  |
| NM_032646 | Homo sapiens tweety homolog 2 (Drosophila) (TTYH2), mRNA   |
| NM_006928 | Homo sapiens silver homolog (mouse) (SILV), mRNA   |
| NM_080390 | Homo sapiens my048 protein (my048), mRNA   |
| NM_080388 | Homo sapiens hypothetical protein MGC17528 (MGC17528), mRNA  |
| NM_080387 | Homo sapiens C-type lectin-like receptor (CLEC-6), mRNA  |
| NM_080284 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 6 (ABCA6), mRNA   |
| NM_080283 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 9 (ABCA9), mRNA   |
| NM_080282 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 10 (ABCA10), mRNA   |
| NM_006549 | Homo sapiens calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2), mRNA   |
| NM_007200 | Homo sapiens A kinase (PRKA) anchor protein 13 (AKAP13), mRNA  |
| NM_002476 | Homo sapiens myosin, light polypeptide 4, alkali; atrial, embryonic (MYL4), mRNA   |
| NM_001853 | Homo sapiens collagen, type IX, alpha 3 (COL9A3), mRNA   |
| NM_006001 | Homo sapiens tubulin, alpha 2 (TUBA2), transcript variant 1, mRNA  |
| NM_079836 | Homo sapiens tubulin, alpha 2 (TUBA2), transcript variant 2, mRNA  |
| NM_006000 | Homo sapiens tubulin, alpha 1 (testis specific) (TUBA1), mRNA  |
| NM_004376 | Homo sapiens COX15 homolog, cytochrome c oxidase assembly protein (yeast) (COX15), nuclear gene encoding mitochondrial protein, transcript variant 2, mRNA |
| NM_024407 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 7 (20kD) (NADH-coenzyme Q reductase) (NDUFS7), mRNA  |
| NM_078625 | Homo sapiens vanin 3 (VNN3), transcript variant 2, mRNA  |
| NM_018399 | Homo sapiens vanin 3 (VNN3), transcript variant 1, mRNA  |
| NM_078488 | Homo sapiens vanin 2 (VNN2), transcript variant 2, mRNA  |
| NM_004665 | Homo sapiens vanin 2 (VNN2), transcript variant 1, mRNA  |

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| NM_013245 | Homo sapiens vacuolar protein sorting factor 4A (VPS4A), mRNA   |
| NM_058240 | Homo sapiens solute carrier family 8 (sodium-calcium exchanger), member 3 (SLC8A3), transcript variant b, mRNA        |
| NM_033262 | Homo sapiens solute carrier family 8 (sodium-calcium exchanger), member 3 (SLC8A3), transcript variant a, mRNA        |
| NM_004869 | Homo sapiens suppressor of K <sup>+</sup> transport defect 1 (SKD1), mRNA   |
| NM_078474 | Homo sapiens BBP-like protein 2 (BLP2), transcript variant 1, mRNA  |
| NM_025141 | Homo sapiens BBP-like protein 2 (BLP2), transcript variant 2, mRNA  |
| NM_078473 | Homo sapiens BBP-like protein 1 (BLP1), transcript variant 1, mRNA  |
| NM_031940 | Homo sapiens BBP-like protein 1 (BLP1), transcript variant 2, mRNA  |
| NM_020749 | Homo sapiens AT2 receptor-interacting protein 1 (ATIP1), mRNA   |
| NM_018672 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 5 (ABCA5), mRNA  |
| NM_020177 | Homo sapiens feminization 1 homolog a (FEM1A), mRNA   |
| NM_002088 | Homo sapiens glutamate receptor, ionotropic, kainate 5 (GRIK5), mRNA  |
| NM_006835 | Homo sapiens cyclin I (CCNI), mRNA  |
| NM_001239 | Homo sapiens cyclin H (CCNH), mRNA  |
| NM_014286 | Homo sapiens frequenin homolog (Drosophila) (FREQ), mRNA  |
| NM_006650 | Homo sapiens complexin 2 (CPLX2), mRNA  |
| NM_006651 | Homo sapiens complexin 1 (CPLX1), mRNA  |
| NM_006463 | Homo sapiens associated molecule with the SH3 domain of STAM (AMSH), mRNA   |
| NM_001850 | Homo sapiens collagen, type VIII, alpha 1 (COL8A1), mRNA  |
| NM_000094 | Homo sapiens collagen, type VII, alpha 1 (epidermolysis bullosa, dystrophic, dominant and recessive) (COL7A1), mRNA   |
| NM_000077 | Homo sapiens cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 1, mRNA |
| NM_058197 | Homo sapiens cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 3, mRNA |
| NM_058196 | Homo sapiens cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 2, mRNA |
| NM_058195 | Homo sapiens cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 4, mRNA |
| NM_014800 | Homo sapiens engulfment and cell motility 1 (ced-12 homolog, C. elegans) (ELMO1), mRNA                                |
| NM_079834 | Homo sapiens secretory carrier membrane protein 4 (SCAMP-4), mRNA   |
| NM_019110 | Homo sapiens hypothetical protein P1 p373c6 (PIP373C6), mRNA  |
| NM_022086 | Homo sapiens engulfment and cell motility 2 (ced-12 homolog, C. elegans) (ELMO2), mRNA                                |
| NM_058183 | Homo sapiens SON DNA binding protein (SON), mRNA  |
| NM_003103 | Homo sapiens SON DNA binding protein (SON), mRNA  |
| NM_030767 | Homo sapiens AT-hook transcription factor AKNA (AKNA), mRNA   |
| NM_058191 | Homo sapiens chromosome 21 open reading frame 66 (C21orf66), mRNA   |
| NM_015657 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 12 (ABCA12), mRNA                                      |
| NM_020427 | Homo sapiens ARS component B (ARS), mRNA  |
| NM_021638 | Homo sapiens actin filament associated protein (AFAP), mRNA   |
| NM_005782 | Homo sapiens transcriptional coactivator (ALY), mRNA  |
| NM_031916 | Homo sapiens AKAP-associated sperm protein (ASP), mRNA  |
| NM_024083 | Homo sapiens alveolar soft part sarcoma chromosome region, candidate 1 (ASPSR1), mRNA                                 |
| NM_058230 | Homo sapiens zinc finger protein 354B (ZNF354B), mRNA   |



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| NM_021935 | Homo sapiens homolog of mouse Bv8 (Bombina variegata 8 kDa); prokineticin 2 precursor (BV8), mRNA      |
| NM_015399 | Homo sapiens breast cancer metastasis-suppressor 1 (BRMS1), mRNA                                       |
| NM_007073 | Homo sapiens blood vessel epicardial substance (BVES), mRNA  |
| NM_017726 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 14D (PPP1R14D), mRNA                |
| NM_006451 | Homo sapiens polyadenylate binding protein-interacting protein 1 (PAIP1), mRNA                         |
| NM_018073 | Homo sapiens SSA protein SS-56 (SS-56), mRNA   |
| NM_032812 | Homo sapiens tumor endothelial marker 7-related precursor (TEM7R), mRNA                                |
| NM_022748 | Homo sapiens tumor endothelial marker 6 (TEM6), mRNA   |
| NM_032777 | Homo sapiens tumor endothelial marker 5 precursor (TEM5), mRNA   |
| NM_022779 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 31 (DDX31), mRNA                             |
| NM_018454 | Homo sapiens nucleolar protein ANKT (ANKT), mRNA   |
| NM_016489 | Homo sapiens uridine 5' monophosphate hydrolase 1 (UMPH1), mRNA  |
| NM_078483 | Homo sapiens lysosomal amino acid transporter 1 (LYAAT1), mRNA   |
| NM_019606 | Homo sapiens hypothetical protein FLJ20257 (FLJ20257), mRNA  |
| NM_015256 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 6 (FACL6), mRNA                                  |
| NM_003393 | Homo sapiens wingless-type MMTV integration site family, member 8B (WNT8B), mRNA                       |
| NM_058244 | Homo sapiens wingless-type MMTV integration site family, member 8A (WNT8A), transcript variant 2, mRNA |
| NM_058238 | Homo sapiens wingless-type MMTV integration site family, member 7B (WNT7B), mRNA                       |
| NM_004625 | Homo sapiens wingless-type MMTV integration site family, member 7A (WNT7A), mRNA                       |
| NM_058242 | Homo sapiens keratin 6C (KRT6C), mRNA  |
| NM_005555 | Homo sapiens keratin 6B (KRT6B), mRNA  |
| NM_005554 | Homo sapiens keratin 6A (KRT6A), mRNA  |
| NM_058207 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant E, mRNA                          |
| NM_058206 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant B, mRNA                          |
| NM_058203 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant C, mRNA                          |
| NM_058202 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant H, mRNA                          |
| NM_058201 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant D, mRNA                          |
| NM_058200 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant G, mRNA                          |
| NM_016512 | Homo sapiens sperm associated antigen 11 (SPAG11), transcript variant A, mRNA                          |
| NM_057180 | Homo sapiens vacuolar protein sorting 29 (yeast) (VPS29), transcript variant 2, mRNA                   |
| NM_016226 | Homo sapiens vacuolar protein sorting 29 (yeast) (VPS29), transcript variant 1, mRNA                   |
| NM_053004 | Homo sapiens guanine nucleotide binding protein (G protein), beta polypeptide 1-like (GNB1L), mRNA     |
| NM_003902 | Homo sapiens far upstream element (FUSE) binding protein 1 (FUBP1), mRNA                               |
| NM_058217 | Homo sapiens RAD51 homolog C (S. cerevisiae) (RAD51C), transcript variant                              |

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| NM_058216 | Homo sapiens RAD51 homolog C (S. cerevisiae) (RAD51C), transcript variant 1, mRNA                     |
| NM_002876 | Homo sapiens RAD51 homolog C (S. cerevisiae) (RAD51C), transcript variant 2, mRNA                     |
| NM_058179 | Homo sapiens phosphoserine aminotransferase (PSA), transcript variant 1, mRNA                         |
| NM_021154 | Homo sapiens phosphoserine aminotransferase (PSA), transcript variant 2, mRNA                         |
| NM_078469 | Homo sapiens BRCA2 and CDKN1A interacting protein (BCCIP), transcript variant C, mRNA                 |
| NM_078468 | Homo sapiens BRCA2 and CDKN1A interacting protein (BCCIP), transcript variant B, mRNA                 |
| NM_016567 | Homo sapiens BRCA2 and CDKN1A interacting protein (BCCIP), transcript variant A, mRNA                 |
| NM_058177 | Homo sapiens histone deacetylase 9 (HDAC9-PENDING), transcript variant 2, mRNA                        |
| NM_058176 | Homo sapiens histone deacetylase 9 (HDAC9-PENDING), transcript variant 1, mRNA                        |
| NM_022110 | Homo sapiens FK506 binding protein like (FKBPL), mRNA   |
| NM_012181 | Homo sapiens FK506 binding protein 8 (38kD) (FKBP8), mRNA   |
| NM_003602 | Homo sapiens FK506 binding protein 6 (36kD) (FKBP6), mRNA   |
| NM_004117 | Homo sapiens FK506 binding protein 5 (FKBP5), mRNA  |
| NM_002014 | Homo sapiens FK506 binding protein 4 (59kD) (FKBP4), mRNA   |
| NM_057092 | Homo sapiens FK506 binding protein 2 (13kD) (FKBP2), transcript variant 2, mRNA                       |
| NM_004470 | Homo sapiens FK506 binding protein 2 (13kD) (FKBP2), transcript variant 1, mRNA                       |
| NM_004116 | Homo sapiens FK506 binding protein 1B (12.6 kD) (FKBP1B), transcript variant 1, mRNA                  |
| NM_054033 | Homo sapiens FK506 binding protein 1B (12.6 kD) (FKBP1B), transcript variant 2, mRNA                  |
| NM_000801 | Homo sapiens FK506 binding protein 1A (12kD) (FKBP1A), transcript variant 12B, mRNA                   |
| NM_054014 | Homo sapiens FK506 binding protein 1A (12kD) (FKBP1A), transcript variant 12A, mRNA                   |
| NM_057175 | Homo sapiens hypothetical protein FLJ13340 (FLJ13340), transcript variant 1, mRNA                     |
| NM_025085 | Homo sapiens hypothetical protein FLJ13340 (FLJ13340), transcript variant 2, mRNA                     |
| NM_014708 | Homo sapiens kinetochore associated 1 (KNTC1), mRNA   |
| NM_058199 | Homo sapiens olfactomedin 1 (OLFM1), transcript variant 3, mRNA                                       |
| NM_014279 | Homo sapiens olfactomedin 1 (OLFM1), transcript variant 1, mRNA                                       |
| NM_057174 | Homo sapiens peroxisomal biogenesis factor 16 (PEX16), transcript variant 2, mRNA                     |
| NM_033118 | Homo sapiens myosin light chain kinase 2, skeletal muscle (MYLK2), mRNA                               |
| NM_019117 | Homo sapiens kelch-like 4 (Drosophila) (KLHL4), transcript variant 1, mRNA                            |
| NM_005103 | Homo sapiens fasciculation and elongation protein zeta 1 (zygin I) (FEZ1), transcript variant 1, mRNA |
| NM_022549 | Homo sapiens fasciculation and elongation protein zeta 1 (zygin I) (FEZ1), transcript variant 2, mRNA |
| NM_005112 | Homo sapiens WD repeat domain 1 (WDR1), transcript variant 2, mRNA                                    |

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| NM_017491 | Homo sapiens WD repeat domain 1 (WDR1), transcript variant 1, mRNA  |
| NM_001862 | Homo sapiens cytochrome c oxidase subunit Vb (COX5B), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_004255 | Homo sapiens cytochrome c oxidase subunit Va (COX5A), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_057162 | Homo sapiens kelch-like 4 (Drosophila) (KLHL4), transcript variant 2, mRNA                                |
| NM_033427 | Homo sapiens cortactin binding protein 2 (CORTBP2), mRNA  |
| NM_001799 | Homo sapiens cyclin-dependent kinase 7 (MO15 homolog, Xenopus laevis, cdk-activating kinase) (CDK7), mRNA |
| NM_057089 | Homo sapiens adaptor-related protein complex 1, sigma 1 subunit (AP1S1), transcript variant 2, mRNA       |
| NM_001283 | Homo sapiens adaptor-related protein complex 1, sigma 1 subunit (AP1S1), transcript variant 1, mRNA       |
| NM_005148 | Homo sapiens unc-119 homolog (C. elegans) (UNC119), transcript variant 1, mRNA                            |
| NM_054035 | Homo sapiens unc-119 homolog (C. elegans) (UNC119), transcript variant 2, mRNA                            |
| NM_017675 | Homo sapiens protocadherin LKC (PC-LKC), mRNA   |
| NM_002401 | Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP3K3), mRNA                              |
| NM_003728 | Homo sapiens unc-5 homolog B (C. elegans) (UNC5C), mRNA   |
| NM_004673 | Homo sapiens angiopoietin-like 1 (ANGPTL1), mRNA  |
| NM_054016 | Homo sapiens FUS interacting protein (serine-arginine rich) 1 (FUSIP1), transcript variant 2, mRNA        |
| NM_006625 | Homo sapiens FUS interacting protein (serine-arginine rich) 1 (FUSIP1), transcript variant 1, mRNA        |
| NM_054027 | Homo sapiens ankylosis, progressive homolog (mouse) (ANKH), transcript variant 2, mRNA                    |
| NM_019847 | Homo sapiens ankylosis, progressive homolog (mouse) (ANKH), transcript variant 1, mRNA                    |
| NM_006363 | Homo sapiens Sec23 homolog B (S. cerevisiae) (SEC23B), transcript variant 1, mRNA                         |
| NM_032986 | Homo sapiens Sec23 homolog B (S. cerevisiae) (SEC23B), transcript variant 3, mRNA                         |
| NM_032985 | Homo sapiens Sec23 homolog B (S. cerevisiae) (SEC23B), transcript variant 2, mRNA                         |
| NM_053285 | Homo sapiens tektin 1 (TEKT1), mRNA   |
| NM_018440 | Homo sapiens phosphoprotein associated with glycosphingolipid-enriched microdomains (PAG), mRNA           |
| NM_014479 | Homo sapiens ADAM-like, decysin 1 (ADAMDEC1), mRNA  |
| NM_016545 | Homo sapiens immediate early response 5 (IER5), mRNA  |
| NM_052820 | Homo sapiens coronin, actin binding protein, 2A (CORO2A), transcript variant 2, mRNA                      |
| NM_003389 | Homo sapiens coronin, actin binding protein, 2A (CORO2A), transcript variant 1, mRNA                      |
| NM_032587 | Homo sapiens caspase recruitment domain family, member 6 (CARD6), mRNA                                    |
| NM_052814 | Homo sapiens caspase recruitment domain family, member 9 (CARD9), transcript variant 2, mRNA              |
| NM_052813 | Homo sapiens caspase recruitment domain family, member 9 (CARD9), transcript variant 1, mRNA              |
| NM_022352 | Homo sapiens caspase recruitment domain family, member 9 (CARD9), transcript variant 3, mRNA              |

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| NM_052978 | Homo sapiens tripartite motif-containing 9 (TRIM9), transcript variant 2, mRNA                           |
| NM_015163 | Homo sapiens tripartite motif-containing 9 (TRIM9), transcript variant 1, mRNA                           |
| NM_052840 | Homo sapiens bruno-like 6, RNA binding protein (Drosophila) (BRUNOL6), mRNA                              |
| NM_000967 | Homo sapiens ribosomal protein L3 (RPL3), mRNA   |
| NM_015125 | Homo sapiens capicua homolog (Drosophila) (CIC), mRNA  |
| NM_018256 | Homo sapiens WD repeat domain 12 (WDR12), mRNA   |
| NM_016601 | Homo sapiens potassium channel, subfamily K, member 9 (TASK-3) (KCNK9), mRNA                             |
| NM_033415 | Homo sapiens hypothetical gene MGC19595 (MGC19595), mRNA   |
| NM_001253 | Homo sapiens CDC5 cell division cycle 5-like (S. pombe) (CDC5L), mRNA                                    |
| NM_007065 | Homo sapiens CDC37 cell division cycle 37 homolog (S. cerevisiae) (CDC37), mRNA                          |
| NM_003504 | Homo sapiens CDC45 cell division cycle 45-like (S. cerevisiae) (CDC45L), mRNA                            |
| NM_006035 | Homo sapiens CDC42 binding protein kinase beta (DMPK-like) (CDC42BPB), mRNA                              |
| NM_044472 | Homo sapiens cell division cycle 42 (GTP binding protein, 25kD) (CDC42), transcript variant 2, mRNA      |
| NM_001791 | Homo sapiens cell division cycle 42 (GTP binding protein, 25kD) (CDC42), transcript variant 1, mRNA      |
| NM_001254 | Homo sapiens CDC6 cell division cycle 6 homolog (S. cerevisiae) (CDC6), mRNA                             |
| NM_022894 | Homo sapiens poly(A) polymerase gamma (PAPOLG), mRNA   |
| NM_033655 | Homo sapiens cell recognition molecule CASPR3 (CASPR3), transcript variant 1, mRNA                       |
| NM_024879 | Homo sapiens cell recognition molecule CASPR3 (CASPR3), transcript variant 2, mRNA                       |
| NM_012115 | Homo sapiens CASP8 associated protein 2 (CASP8AP2), mRNA   |
| NM_012173 | Homo sapiens F-box only protein 25 (FBXO25), mRNA  |
| NM_033624 | Homo sapiens F-box only protein 21 (FBXO21), transcript variant 1, mRNA                                  |
| NM_015002 | Homo sapiens F-box only protein 21 (FBXO21), transcript variant 2, mRNA                                  |
| NM_033625 | Homo sapiens ribosomal protein L34 (RPL34), transcript variant 2, mRNA                                   |
| NM_000995 | Homo sapiens ribosomal protein L34 (RPL34), transcript variant 1, mRNA                                   |
| NM_033540 | Homo sapiens mitofusin 1 (MFN1), transcript variant 1, mRNA  |
| NM_005612 | Homo sapiens RE1-silencing transcription factor (REST), mRNA   |
| NM_007085 | Homo sapiens follistatin-like 1 (FSTL1), mRNA  |
| NM_000993 | Homo sapiens ribosomal protein L31 (RPL31), mRNA   |
| NM_012180 | Homo sapiens F-box only protein 8 (FBXO8), mRNA  |
| NM_033182 | Homo sapiens F-box protein FBX30 (FBX30), mRNA   |
| NM_033406 | Homo sapiens F-box only protein 3 (FBXO3), transcript variant 2, mRNA                                    |
| NM_012175 | Homo sapiens F-box only protein 3 (FBXO3), transcript variant 1, mRNA                                    |
| NM_017425 | Homo sapiens sperm autoantigenic protein 17 (SPA17), mRNA  |
| NM_005633 | Homo sapiens son of sevenless homolog 1 (Drosophila) (SOS1), mRNA  |
| NM_003333 | Homo sapiens ubiquitin A-52 residue ribosomal protein fusion product 1 (UBA52), mRNA                     |
| NM_019894 | Homo sapiens transmembrane protease, serine 4 (TMPRSS4), mRNA  |
| NM_033313 | Homo sapiens CDC14 cell division cycle 14 homolog A (S. cerevisiae) (CDC14A), transcript variant 3, mRNA |
| NM_033312 | Homo sapiens CDC14 cell division cycle 14 homolog A (S. cerevisiae) (CDC14A), transcript variant 2, mRNA |
| NM_003672 | Homo sapiens CDC14 cell division cycle 14 homolog A (S. cerevisiae)                                      |

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|           | (CDC14A), transcript variant 1, mRNA   |
| NM_005786 | Homo sapiens serologically defined colon cancer antigen 33 (SDCCAG33), mRNA  |
| NM_003618 | Homo sapiens mitogen-activated protein kinase kinase kinase kinase 3 (MAP4K3), mRNA                                |
| NM_006577 | Homo sapiens UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1 (B3GNT1), transcript variant 1, mRNA    |
| NM_020981 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 1 (B3GALT1), mRNA                      |
| NM_033252 | Homo sapiens UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1 (B3GNT1), transcript variant 2, mRNA    |
| NM_002954 | Homo sapiens ribosomal protein S27a (RPS27A), mRNA   |
| NM_000971 | Homo sapiens ribosomal protein L7 (RPL7), mRNA   |
| NM_033344 | Homo sapiens egl nine homolog 3 (C. elegans) (EGLN3), mRNA   |
| NM_024023 | Homo sapiens unkempt-like (Drosophila) (UNKL), mRNA  |
| NM_033221 | Homo sapiens tripartite motif-containing 14 (TRIM14), transcript variant 4, mRNA                                   |
| NM_033220 | Homo sapiens tripartite motif-containing 14 (TRIM14), transcript variant 3, mRNA                                   |
| NM_033219 | Homo sapiens tripartite motif-containing 14 (TRIM14), transcript variant 2, mRNA                                   |
| NM_014788 | Homo sapiens tripartite motif-containing 14 (TRIM14), transcript variant 1, mRNA                                   |
| NM_006074 | Homo sapiens tripartite motif-containing 22 (TRIM22), mRNA   |
| NM_012210 | Homo sapiens tripartite motif-containing 32 (TRIM32), mRNA   |
| NM_007276 | Homo sapiens chromobox homolog 3 (HP1 gamma homolog, Drosophila) (CBX3), mRNA                                      |
| NM_025227 | Homo sapiens hypothetical protein DJ726C3.2 (DJ726C3.2), mRNA  |
| NM_015271 | Homo sapiens tripartite motif-containing 2 (TRIM2), mRNA   |
| NM_017838 | Homo sapiens nucleolar protein family A, member 2 (H/ACA small nucleolar RNPs) (NOLA2), mRNA                       |
| NM_032993 | Homo sapiens nucleolar protein family A, member 1 (H/ACA small nucleolar RNPs) (NOLA1), transcript variant 2, mRNA |
| NM_018983 | Homo sapiens nucleolar protein family A, member 1 (H/ACA small nucleolar RNPs) (NOLA1), transcript variant 1, mRNA |
| NM_004722 | Homo sapiens adaptor-related protein complex 4, mu 1 subunit (AP4M1), mRNA   |
| NM_033066 | Homo sapiens membrane protein, palmitoylated 4 (MAGUK p55 subfamily member 4) (MPP4), mRNA                         |
| NM_033030 | Homo sapiens bol, boule-like (Drosophila) (BOLL), mRNA   |
| NM_004216 | Homo sapiens death effector domain-containing (DEDD), transcript variant 2, mRNA                                   |
| NM_032998 | Homo sapiens death effector domain-containing (DEDD), transcript variant 1, mRNA                                   |
| NM_033010 | Homo sapiens poly(rC) binding protein 4 (PCBP4), transcript variant 4, mRNA  |
| NM_033009 | Homo sapiens poly(rC) binding protein 4 (PCBP4), transcript variant 2, mRNA  |
| NM_033008 | Homo sapiens poly(rC) binding protein 4 (PCBP4), transcript variant 3, mRNA  |
| NM_020418 | Homo sapiens poly(rC) binding protein 4 (PCBP4), transcript variant 1, mRNA  |
| NM_032944 | Homo sapiens serine/threonine kinase 31 (STK31), transcript variant 2, mRNA  |
| NM_031414 | Homo sapiens serine/threonine kinase 31 (STK31), transcript variant 1, mRNA  |
| NM_014302 | Homo sapiens Sec61 gamma (SEC61G), mRNA  |
| NM_013336 | Homo sapiens protein transport protein SEC61 alpha subunit isoform 1   |

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|           | (SEC61A1), mRNA  |
| NM_031431 | Homo sapiens tethering factor SEC34 (SEC34), mRNA  |
| NM_015490 | Homo sapiens secretory pathway component Sec31B-1 (SEC31B-1), mRNA   |
| NM_004892 | Homo sapiens SEC22 vesicle trafficking protein-like 1 (S. cerevisiae) (SEC22L1), mRNA                        |
| NM_032970 | Homo sapiens vesicle trafficking protein (SEC22C), transcript variant 1, mRNA                                |
| NM_000969 | Homo sapiens ribosomal protein L5 (RPL5), mRNA   |
| NM_005034 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide K (7.0kD) (POLR2K), mRNA                         |
| NM_014459 | Homo sapiens protocadherin 17 (PCDH17), mRNA   |
| NM_032961 | Homo sapiens protocadherin 10 (PCDH10), transcript variant 1, mRNA   |
| NM_020815 | Homo sapiens protocadherin 10 (PCDH10), transcript variant 2, mRNA   |
| NM_031988 | Homo sapiens mitogen-activated protein kinase kinase 6 (MAP2K6), transcript variant 2, mRNA                  |
| NM_002758 | Homo sapiens mitogen-activated protein kinase kinase 6 (MAP2K6), transcript variant 1, mRNA                  |
| NM_032419 | Homo sapiens dom-3 homolog Z (C. elegans) (DOM3Z), transcript variant 1, mRNA                                |
| NM_032966 | Homo sapiens Burkitt lymphoma receptor 1, GTP binding protein (BLR1), transcript variant 2, mRNA             |
| NM_001716 | Homo sapiens Burkitt lymphoma receptor 1, GTP binding protein (BLR1), transcript variant 1, mRNA             |
| NM_004951 | Homo sapiens Epstein-Barr virus induced gene 2 (lymphocyte-specific G protein-coupled receptor) (EBI2), mRNA |
| NM_004874 | Homo sapiens BCL2-associated athanogene 4 (BAG4), mRNA   |
| NM_001016 | Homo sapiens ribosomal protein S12 (RPS12), mRNA   |
| NM_031994 | Homo sapiens ring finger protein 17 (RNF17), transcript variant short, mRNA                                  |
| NM_031271 | Homo sapiens testis expressed sequence 15 (TEX15), mRNA  |
| NM_018995 | Homo sapiens Mov10l1, Moloney leukemia virus 10-like 1, homolog (mouse) (MOV10L1), mRNA                      |
| NM_032510 | Homo sapiens par-6 partitioning defective 6 homolog gamma (C. elegans) (PARD6G), mRNA                        |
| NM_006704 | Homo sapiens suppressor of G2 allele of SKP1, S. cerevisiae, homolog of (SGT1), mRNA                         |
| NM_031968 | Homo sapiens nuclear prelamin A recognition factor (NARF), transcript variant 2, mRNA                        |
| NM_012336 | Homo sapiens nuclear prelamin A recognition factor (NARF), transcript variant 1, mRNA                        |
| NM_003980 | Homo sapiens microtubule-associated protein 7 (MAP7), mRNA   |
| NM_032380 | Homo sapiens elongation factor G2 (EFG2), mRNA   |
| NM_032214 | Homo sapiens Src-like-adaptor 2 (SLA2), mRNA   |
| NM_020064 | Homo sapiens BarH-like 1 (Drosophila) (BARHL1), mRNA   |
| NM_005916 | Homo sapiens MCM7 minichromosome maintenance deficient 7 (S. cerevisiae) (MCM7), mRNA                        |
| NM_004098 | Homo sapiens empty spiracles homolog 2 (Drosophila) (EMX2), mRNA   |
| NM_005826 | Homo sapiens heterogeneous nuclear ribonucleoprotein R (HNRPR), mRNA   |
| NM_006418 | Homo sapiens differentially expressed in hematopoietic lineages (GW112), mRNA                                |
| NM_005016 | Homo sapiens poly(rC) binding protein 2 (PCBP2), transcript variant 1, mRNA                                  |
| NM_031989 | Homo sapiens poly(rC) binding protein 2 (PCBP2), transcript variant 2, mRNA                                  |
| NM_006196 | Homo sapiens poly(rC) binding protein 1 (PCBP1), mRNA  |
| NM_031844 | Homo sapiens heterogeneous nuclear ribonucleoprotein U (scaffold attachment                                  |

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|           | factor A) (HNRPU), transcript variant 1, mRNA   |
| NM_004501 | Homo sapiens heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) (HNRPU), transcript variant 2, mRNA   |
| NM_004500 | Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1/C2) (HNRPC), transcript variant 2, mRNA  |
| NM_031314 | Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1/C2) (HNRPC), transcript variant 1, mRNA  |
| NM_031370 | Homo sapiens heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kD) (HNRPD), transcript variant 1, mRNA  |
| NM_031369 | Homo sapiens heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kD) (HNRPD), transcript variant 2, mRNA  |
| NM_002138 | Homo sapiens heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kD) (HNRPD), transcript variant 3, mRNA  |
| NM_003903 | Homo sapiens CDC16 cell division cycle 16 homolog (S. cerevisiae) (CDC16), mRNA   |
| NM_031483 | Homo sapiens itchy homolog E3 ubiquitin protein ligase (mouse) (ITCH), mRNA   |
| NM_031907 | Homo sapiens ubiquitin specific protease 26 (USP26), mRNA   |
| NM_031866 | Homo sapiens frizzled homolog 8 (Drosophila) (FZD8), mRNA   |
| NG_000004 | Homo sapiens genomic cytochrome P450, subfamily IIIA (naphthodipine oxidase) (CYP3A) on chromosome 7  |
| NM_001788 | Homo sapiens CDC10 cell division cycle 10 homolog (S. cerevisiae) (CDC10), mRNA   |
| NM_004276 | Homo sapiens calcium binding protein 1 (calbrain) (CABP1), transcript variant 2, mRNA   |
| NM_031205 | Homo sapiens calcium binding protein 1 (calbrain) (CABP1), transcript variant 1, mRNA   |
| NM_000784 | Homo sapiens cytochrome P450, subfamily XXVIIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_031491 | Homo sapiens retinol binding protein 5, cellular (RBP5), mRNA   |
| NM_006929 | Homo sapiens superkiller viralicidic activity 2-like (S. cerevisiae) (SKIV2L), mRNA   |
| NM_001447 | Homo sapiens FAT tumor suppressor homolog 2 (Drosophila) (FAT2), mRNA   |
| NM_007242 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 19 (DBP5 homolog, yeast) (DDX19), mRNA  |
| NM_006773 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 18 (Myc-regulated) (DDX18), mRNA  |
| NM_030655 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, S. cerevisiae) (DDX11), transcript variant 3, mRNA  |
| NM_030653 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, S. cerevisiae) (DDX11), transcript variant 1, mRNA  |
| NM_000770 | Homo sapiens cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 8 (CYP2C8), transcript variant Hpl-1, mRNA   |
| NM_030878 | Homo sapiens cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 8 (CYP2C8), transcript variant Hpl-2, mRNA   |
| NM_012239 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 3 (S. cerevisiae) (SIRT3), mRNA  |
| NM_030593 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 2 (S. cerevisiae) (SIRT2), transcript variant 2, mRNA  |
| NM_012237 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 2 (S. cerevisiae) (SIRT2), transcript variant 1, mRNA  |

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| NM_012238 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 1 ( <i>S. cerevisiae</i> ) (SIRT1), mRNA   |
| NM_031309 | Homo sapiens scratch homolog 1, zinc finger protein ( <i>Drosophila</i> ) (SCRT1), mRNA   |
| NM_031278 | Homo sapiens tudor domain containing 1 (TDRD1), mRNA  |
| NM_031277 | Homo sapiens ring finger protein 17 (RNF17), transcript variant long, mRNA  |
| NM_031276 | Homo sapiens testis expressed sequence 11 (TEX11), mRNA   |
| NM_031273 | Homo sapiens testis expressed sequence 13B (TEX13B), mRNA   |
| NM_031272 | Homo sapiens testis expressed sequence 14 (TEX14), mRNA   |
| NM_006636 | Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD <sup>+</sup> dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_022818 | Homo sapiens microtubule-associated proteins 1A/1B light chain 3 (MAP1A/1BLC3), mRNA  |
| NM_018607 | Homo sapiens hypothetical protein PRO1853 (PRO1853), mRNA   |
| NM_004856 | Homo sapiens kinesin-like 5 (mitotic kinesin-like protein 1) (KNSL5), mRNA  |
| NM_030979 | Homo sapiens poly(A) binding protein, cytoplasmic 3 (PABPC3), mRNA  |
| NM_030770 | Homo sapiens transmembrane protease, serine 5 (spinesin) (TMPRSS5), mRNA  |
| NM_002545 | Homo sapiens opioid binding protein/cell adhesion molecule-like (OPCML), mRNA   |
| NM_014676 | Homo sapiens pumilio homolog 1 ( <i>Drosophila</i> ) (PUM1), mRNA   |
| NM_030673 | Homo sapiens SEC13-like 1 ( <i>S. cerevisiae</i> ) (SEC13L1), mRNA  |
| NM_003342 | Homo sapiens ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, <i>C. elegans</i> ) (UBE2G1), mRNA   |
| NM_022051 | Homo sapiens egl nine homolog 1 ( <i>C. elegans</i> ) (EGLN1), mRNA   |
| NM_015577 | Homo sapiens retinoic acid induced 14 (RAI14), mRNA   |
| NM_012170 | Homo sapiens F-box only protein 22 (FBXO22), mRNA   |
| NM_022304 | Homo sapiens histamine receptor H2 (HRH2), mRNA   |
| NM_022333 | Homo sapiens TIA1 cytotoxic granule-associated RNA binding protein-like 1 (TIAL1), transcript variant 2, mRNA   |
| NM_003252 | Homo sapiens TIA1 cytotoxic granule-associated RNA binding protein-like 1 (TIAL1), transcript variant 1, mRNA   |
| NM_017910 | Homo sapiens hypothetical protein FLJ20628 (FLJ20628), mRNA   |
| NM_012384 | Homo sapiens glucocorticoid modulatory element binding protein 2 (GMEB2), mRNA  |
| NM_006118 | Homo sapiens HS1 binding protein (HAX1), mRNA   |
| NM_022740 | Homo sapiens homeodomain interacting protein kinase 2 (HIPK2), mRNA   |
| NM_002005 | Homo sapiens feline sarcoma oncogene (FES), mRNA  |
| NM_014757 | Homo sapiens mastermind-like 1 ( <i>Drosophila</i> ) (MAML1), mRNA  |
| NM_025136 | Homo sapiens optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia) (OPA3), mRNA   |
| NM_024505 | Homo sapiens NADPH oxidase, EF hand calcium-binding domain 5 (NOX5), mRNA   |
| NM_022362 | Homo sapiens MMS19-like (MET18 homolog, <i>S. cerevisiae</i> ) (MMS19L), mRNA   |
| NM_000256 | Homo sapiens myosin binding protein C, cardiac (MYBPC3), mRNA   |
| NM_000276 | Homo sapiens oculocerebrorenal syndrome of Lowe (OCRL), transcript variant a, mRNA  |
| NM_001587 | Homo sapiens oculocerebrorenal syndrome of Lowe (OCRL), transcript variant b, mRNA  |
| NM_001407 | Homo sapiens cadherin, EGF LAG seven-pass G-type receptor 3 (flamingo homolog, <i>Drosophila</i> ) (CELSR3), mRNA   |



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| NM_001408 | Homo sapiens cadherin, EGF LAG seven-pass G-type receptor 2 (flamingo homolog, Drosophila) (CELSR2), mRNA |
| NM_005735 | Homo sapiens ARPI actin-related protein 1 homolog B, centractin beta (yeast) (ACTR1B), mRNA               |
| NM_012254 | Homo sapiens very long-chain acyl-CoA synthetase homolog 2 (VLCS-H2), mRNA                                |
| NM_012331 | Homo sapiens methionine sulfoxide reductase A (MSRA), mRNA  |
| NM_016596 | Homo sapiens histone deacetylase 7A (HDAC7A), transcript variant 2, mRNA                                  |
| NM_015401 | Homo sapiens histone deacetylase 7A (HDAC7A), transcript variant 1, mRNA                                  |
| NM_004082 | Homo sapiens dynactin 1 (p150, glued homolog, Drosophila) (DCTN1), transcript variant 1, mRNA             |
| NM_023019 | Homo sapiens dynactin 1 (p150, glued homolog, Drosophila) (DCTN1), transcript variant 2, mRNA             |
| NM_002893 | Homo sapiens retinoblastoma binding protein 7 (RBBP7), mRNA   |
| NM_023001 | Homo sapiens retinoblastoma binding protein 1 (RBBP1), transcript variant 3, mRNA                         |
| NM_023000 | Homo sapiens retinoblastoma binding protein 1 (RBBP1), transcript variant 2, mRNA                         |
| NM_002892 | Homo sapiens retinoblastoma binding protein 1 (RBBP1), transcript variant 1, mRNA                         |
| NM_024408 | Homo sapiens Notch homolog 2 (Drosophila) (NOTCH2), mRNA  |
| NM_012311 | Homo sapiens KIN, antigenic determinant of recA protein homolog (mouse) (KIN), mRNA                       |
| NM_021938 | Homo sapiens bruno-like 5, RNA binding protein (Drosophila) (BRUNOL5), mRNA                               |
| NM_020180 | Homo sapiens bruno-like 4, RNA binding protein (Drosophila) (BRUNOL4), mRNA                               |
| NM_005868 | Homo sapiens BET1 homolog (S. cerevisiae) (BET1), mRNA  |
| NM_002467 | Homo sapiens v-myc myelocytomatosis viral oncogene homolog (avian) (MYC), mRNA                            |
| NM_022817 | Homo sapiens period homolog 2 (Drosophila) (PER2), transcript variant 1, mRNA                             |
| NM_003894 | Homo sapiens period homolog 2 (Drosophila) (PER2), transcript variant 2, mRNA                             |
| NM_006660 | Homo sapiens ClpX caseinolytic protease X homolog (E. coli) (CLPX), mRNA                                  |
| NM_012394 | Homo sapiens prefoldin 2 (PFDN2), mRNA  |
| NM_004234 | Homo sapiens zinc finger protein 93 homolog (mouse) (ZFP93), mRNA   |
| NM_005870 | Homo sapiens sin3-associated polypeptide, 18kD (SAP18), mRNA  |
| NM_003350 | Homo sapiens ubiquitin-conjugating enzyme E2 variant 2 (UBE2V2), mRNA                                     |
| NM_022476 | Homo sapiens fused toes homolog (mouse) (FTS), mRNA   |
| NM_022444 | Homo sapiens solute carrier family 13 (sodium/sulfate symporters), member 1 (SLC13A1), mRNA               |
| NM_018127 | Homo sapiens elaC homolog 2 (E. coli) (ELAC2), mRNA   |
| NM_014317 | Homo sapiens trans-prenyltransferase (TPT), mRNA  |
| NM_022173 | Homo sapiens TIA1 cytotoxic granule-associated RNA binding protein (TIA1), transcript variant 2, mRNA     |
| NM_022037 | Homo sapiens TIA1 cytotoxic granule-associated RNA binding protein (TIA1), transcript variant 1, mRNA     |
| NM_004973 | Homo sapiens jumonji homolog (mouse) (JMJ), mRNA  |
| NM_021971 | Homo sapiens GDP-mannose pyrophosphorylase B (GMPPB), transcript variant 2, mRNA                          |
| NM_013334 | Homo sapiens GDP-mannose pyrophosphorylase B (GMPPB), transcript variant                                  |

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|           | 1, mRNA   |
| NM_013335 | Homo sapiens GDP-mannose pyrophosphorylase A (GMPPA), mRNA  |
| NM_021267 | Homo sapiens LAG1 longevity assurance homolog 1 (S. cerevisiae) (LASS1), mRNA   |
| NM_005811 | Homo sapiens growth differentiation factor 11 (GDF11), mRNA   |
| NM_005971 | Homo sapiens FXYD domain-containing ion transport regulator 3 (FXYD3), transcript variant 1, mRNA   |
| NM_021910 | Homo sapiens FXYD domain-containing ion transport regulator 3 (FXYD3), transcript variant 2, mRNA   |
| NM_022096 | Homo sapiens ankyrin repeat domain 5 (ANKRD5), mRNA   |
| NM_022073 | Homo sapiens egl nine homolog 3 (C. elegans) (EGLN3), mRNA  |
| NM_022047 | Homo sapiens differentially expressed in FDCP 6 homolog (mouse) (DEF6), mRNA  |
| NM_021778 | Homo sapiens a disintegrin and metalloproteinase domain 28 (ADAM28), transcript variant 2, mRNA   |
| NM_021777 | Homo sapiens a disintegrin and metalloproteinase domain 28 (ADAM28), transcript variant 3, mRNA   |
| NM_000152 | Homo sapiens glucosidase, alpha; acid (Pompe disease, glycogen storage disease type II) (GAA), mRNA   |
| NM_002910 | Homo sapiens renin binding protein (RENBP), mRNA  |
| NM_012072 | Homo sapiens complement component 1, q subcomponent, receptor 1 (C1QR1), mRNA   |
| NM_000534 | Homo sapiens PMS1 postmeiotic segregation increased 1 (S. cerevisiae) (PMS1), mRNA  |
| NM_005451 | Homo sapiens enigma (LIM domain protein) (ENIGMA), mRNA   |
| NM_021975 | Homo sapiens v-rel reticuloendotheliosis viral oncogene homolog A, nuclear factor of kappa light polypeptide gene enhancer in B-cells 3, p65 (avian) (RELA), mRNA |
| NM_021958 | Homo sapiens H2.0-like homeo box 1 (Drosophila) (HLX1), mRNA  |
| NM_004139 | Homo sapiens lipopolysaccharide binding protein (LBP), mRNA   |
| NM_005442 | Homo sapiens eomesodermin homolog (Xenopus laevis) (EOMES), mRNA  |
| NM_004187 | Homo sapiens Smcx homolog, X chromosome (mouse) (SMCX), mRNA  |
| NM_003170 | Homo sapiens suppressor of Ty 6 homolog (S. cerevisiae) (SUPT6H), mRNA  |
| NM_003062 | Homo sapiens slit homolog 3 (Drosophila) (SLIT3), mRNA  |
| NM_003068 | Homo sapiens slug homolog, zinc finger protein (chicken) (SLUG), mRNA   |
| NM_021824 | Homo sapiens NIF3 NGG1 interacting factor 3-like 1 (S. pombe) (NIF3L1), mRNA  |
| NM_021783 | Homo sapiens ectodysplasin A2 isoform receptor (XEDAR), mRNA  |
| NM_004196 | Homo sapiens cyclin-dependent kinase-like 1 (CDC2-related kinase) (CDKL1), mRNA   |
| NM_000535 | Homo sapiens PMS2 postmeiotic segregation increased 2 (S. cerevisiae) (PMS2), mRNA  |
| NM_002356 | Homo sapiens myristoylated alanine-rich protein kinase C substrate (MARCKS), mRNA   |
| NM_021728 | Homo sapiens orthodenticle homolog 2 (Drosophila) (OTX2), mRNA  |
| NM_014588 | Homo sapiens visual system homeobox 1 homolog, CHX10-like (zebrafish) (VSX1), mRNA  |
| NM_003503 | Homo sapiens CDC7 cell division cycle 7-like 1 (S. cerevisiae) (CDC7L1), mRNA   |
| NM_004059 | Homo sapiens cysteine conjugate-beta lyase; cytoplasmic (glutamine transaminase K, kyneurenine aminotransferase) (CCBL1), mRNA                                    |
| NM_020651 | Homo sapiens pellino homolog 1 (Drosophila) (PELI1), mRNA   |

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| NM_018411 | Homo sapiens hairless homolog (mouse) (HR), mRNA   |
| NM_014569 | Homo sapiens zinc finger protein 95 homolog (mouse) (ZFP95), mRNA  |
| NM_012458 | Homo sapiens translocase of inner mitochondrial membrane 13 homolog B (yeast) (TIMM13B), mRNA                                |
| NM_000672 | Homo sapiens alcohol dehydrogenase 6 (class V) (ADH6), mRNA  |
| NM_003603 | Homo sapiens Arg/Abl-interacting protein ArgBP2 (ARGBP2), transcript variant 1, mRNA   |
| NM_021069 | Homo sapiens Arg/Abl-interacting protein ArgBP2 (ARGBP2), transcript variant 2, mRNA   |
| NM_004950 | Homo sapiens dermatan sulfate proteoglycan 3 (DSPG3), mRNA   |
| NM_004701 | Homo sapiens cyclin B2 (CCNB2), mRNA   |
| NM_021100 | Homo sapiens NFS1 nitrogen fixation 1 (S. cerevisiae) (NFS1), mRNA   |
| NM_021255 | Homo sapiens pellino homolog 2 (Drosophila) (PELI2), mRNA  |
| NM_021115 | Homo sapiens seizure related 6 homolog (mouse)-like (SEZ6L), mRNA  |
| NM_004756 | Homo sapiens numb homolog (Drosophila)-like (NUMBL), mRNA  |
| NM_004690 | Homo sapiens LATS, large tumor suppressor, homolog 1 (Drosophila) (LATS1), mRNA  |
| NM_000461 | Homo sapiens thyroid hormone receptor, beta (erythroblastic leukemia viral (v-erb-a) oncogene homolog 2, avian) (THRB), mRNA |
| NM_021078 | Homo sapiens GCN5 general control of amino-acid synthesis 5-like 2 (yeast) (GCN5L2), mRNA                                    |
| NM_002877 | Homo sapiens RAD51-like 1 (S. cerevisiae) (RAD51L1), mRNA  |
| NM_001552 | Homo sapiens insulin-like growth factor binding protein 4 (IGFBP4), mRNA   |
| NM_002487 | Homo sapiens necdin homolog (mouse) (NDN), mRNA  |
| NM_012425 | Homo sapiens Ras suppressor protein 1 (RSU1), mRNA   |
| NM_005618 | Homo sapiens delta-like 1 (Drosophila) (DLL1), mRNA  |
| NM_021038 | Homo sapiens muscleblind-like (Drosophila) (MBNL), mRNA  |
| NM_014268 | Homo sapiens microtubule-associated protein, RP/EB family, member 2 (MAPRE2), mRNA   |
| NM_020662 | Homo sapiens MRS2-like, magnesium homeostasis factor (S. cerevisiae) (MRS2L), mRNA   |
| NM_020649 | Homo sapiens chromobox homolog 8 (Pc class homolog, Drosophila) (CBX8), mRNA   |
| NM_018436 | Homo sapiens allantoicase (ALLC), mRNA   |
| NM_020528 | Homo sapiens poly(rC) binding protein 3 (PCBP3), mRNA  |
| NM_014276 | Homo sapiens recombining binding protein suppressor of hairless (Drosophila)-like (RBPSUHL), mRNA                            |
| NM_019557 | Homo sapiens hypothetical protein RP1-317E23 (LOC56181), mRNA  |
| NM_020347 | Homo sapiens leucine zipper transcription factor-like 1 (LZTFL1), mRNA   |
| NM_005744 | Homo sapiens ariadne homolog, ubiquitin-conjugating enzyme E2 binding protein, 1 (Drosophila) (ARIH1), mRNA                  |
| NM_007044 | Homo sapiens katanin p60 (ATPase-containing) subunit A 1 (KATNA1), mRNA  |
| NM_002688 | Homo sapiens peanut-like 1 (Drosophila) (PNUTL1), mRNA   |
| NM_013384 | Homo sapiens LAG1 longevity assurance homolog 2 (S. cerevisiae) (LASS2), mRNA  |
| NM_020230 | Homo sapiens peter pan homolog (Drosophila) (PPAN), mRNA   |
| NM_020182 | Homo sapiens transmembrane, prostate androgen induced RNA (TMEPA1), mRNA   |
| NM_020248 | Homo sapiens catenin, beta interacting protein 1 (CTNNBIP1), mRNA  |
| NM_000399 | Homo sapiens early growth response 2 (Krox-20 homolog, Drosophila) (EGR2), mRNA  |
| NM_002965 | Homo sapiens S100 calcium binding protein A9 (calgranulin B) (S100A9),   |

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| NM_002964 | Homo sapiens S100 calcium binding protein A8 (calgranulin A) (S100A8), mRNA  |
| NM_002963 | Homo sapiens S100 calcium binding protein A7 (psoriasin 1) (S100A7), mRNA  |
| NM_014624 | Homo sapiens S100 calcium binding protein A6 (calcyclin) (S100A6), mRNA  |
| NM_019554 | Homo sapiens S100 calcium binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog) (S100A4), transcript variant 2, mRNA |
| NM_002961 | Homo sapiens S100 calcium binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog) (S100A4), transcript variant 1, mRNA |
| NM_005978 | Homo sapiens S100 calcium binding protein A2 (S100A2), mRNA  |
| NM_002537 | Homo sapiens ornithine decarboxylase antizyme 2 (OAZ2), mRNA   |
| NM_019854 | Homo sapiens HMT1 hnRNP methyltransferase-like 3 (S. cerevisiae) (HRMT1L3), mRNA   |
| NM_019619 | Homo sapiens par-3 partitioning defective 3 homolog (C. elegans) (PARD3), mRNA   |
| NM_017454 | Homo sapiens staufer, RNA binding protein (Drosophila) (STAU), transcript variant T1, mRNA   |
| NM_017453 | Homo sapiens staufer, RNA binding protein (Drosophila) (STAU), transcript variant T3, mRNA   |
| NM_017452 | Homo sapiens staufer, RNA binding protein (Drosophila) (STAU), transcript variant T2, mRNA   |
| NM_003785 | Homo sapiens G antigen, family B, 1 (prostate associated) (GAGEB1), mRNA   |
| NM_015044 | Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 2 (GGA2), mRNA  |
| NM_013365 | Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 1 (GGA1), mRNA  |
| NM_004781 | Homo sapiens vesicle-associated membrane protein 3 (cellubrevin) (VAMP3), mRNA   |
| NM_018685 | Homo sapiens anillin, actin binding protein (scraps homolog, Drosophila) (ANLN), mRNA  |
| NM_017927 | Homo sapiens mitofusin 1 (MFN1), transcript variant 2, mRNA  |
| NM_018387 | Homo sapiens spermatid perinuclear RNA binding protein (STRBP), mRNA   |
| NM_018378 | Homo sapiens F-box and leucine-rich repeat protein 8 (FBXL8), mRNA   |
| NM_018158 | Homo sapiens solute carrier family 4 (anion exchanger), member 1, adaptor protein (SLC4A1AP), mRNA   |
| NM_018032 | Homo sapiens LUC7-like (S. cerevisiae) (LUC7L), mRNA   |
| NM_017575 | Homo sapiens chromosome 17 open reading frame 31 (C17orf31), mRNA  |
| NM_018696 | Homo sapiens elcC homolog 1 (E. coli) (ELAC1), mRNA  |
| NM_005781 | Homo sapiens activated p21cdc42Hs kinase (ACK1), mRNA  |
| NM_016831 | Homo sapiens period homolog 3 (Drosophila) (PER3), mRNA  |
| NM_003387 | Homo sapiens Wiskott-Aldrich syndrome protein interacting protein (WASPIP), mRNA   |
| NM_005993 | Homo sapiens tubulin-specific chaperone d (TBCD), mRNA   |
| NM_003014 | Homo sapiens secreted frizzled-related protein 4 (SFRP4), mRNA   |
| NM_006744 | Homo sapiens retinol binding protein 4, plasma (RBP4), mRNA  |
| NM_002899 | Homo sapiens retinol binding protein 1, cellular (RBP1), mRNA  |
| NM_005524 | Homo sapiens hairy homolog (Drosophila) (HRY), mRNA  |
| NM_005206 | Homo sapiens v-crk sarcoma virus CT10 oncogene homolog (avian) (CRK), transcript variant I, mRNA   |
| NM_016823 | Homo sapiens v-crk sarcoma virus CT10 oncogene homolog (avian) (CRK), transcript variant II, mRNA  |
| NM_016948 | Homo sapiens par-6 partitioning defective 6 homolog alpha (C.elegans)  |

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|           | (PARD6A), mRNA   |
| NM_017420 | Homo sapiens sine oculis homeobox homolog 4 (Drosophila) (SIX4), mRNA  |
| NM_016932 | Homo sapiens sine oculis homeobox homolog 2 (Drosophila) (SIX2), mRNA  |
| NM_017415 | Homo sapiens kelch-like 3 (Drosophila) (KLHL3), mRNA   |
| NM_017412 | Homo sapiens frizzled homolog 3 (Drosophila) (FZD3), mRNA  |
| NM_003400 | Homo sapiens exportin 1 (CRM1 homolog, yeast) (XPO1), mRNA   |
| NM_002889 | Homo sapiens retinoic acid receptor responder (tazarotene induced) 2 (RARRES2), mRNA                                   |
| NM_006064 | Homo sapiens GTP-binding protein ragB (RAGB), transcript variant RAGBs, mRNA   |
| NM_016656 | Homo sapiens GTP-binding protein ragB (RAGB), transcript variant RAGBI, mRNA   |
| NM_003857 | Homo sapiens galanin receptor 2 (GALR2), mRNA  |
| NM_016655 | Homo sapiens GA binding protein transcription factor, beta subunit 2 (47kD) (GABPB2), transcript variant gamma, mRNA   |
| NM_002041 | Homo sapiens GA binding protein transcription factor, beta subunit 2 (47kD) (GABPB2), transcript variant gamma, mRNA   |
| NM_016654 | Homo sapiens GA binding protein transcription factor, beta subunit 1 (53kD) (GABPB1), transcript variant beta, mRNA    |
| NM_005254 | Homo sapiens GA binding protein transcription factor, beta subunit 1 (53kD) (GABPB1), transcript variant beta, mRNA    |
| NM_015843 | Homo sapiens LIM domain only 7 (LMO7), transcript variant 3, mRNA  |
| NM_015842 | Homo sapiens LIM domain only 7 (LMO7), transcript variant 2, mRNA  |
| NM_002228 | Homo sapiens v-jun sarcoma virus 17 oncogene homolog (avian) (JUN), mRNA   |
| NM_016178 | Homo sapiens ornithine decarboxylase antizyme 3 (OAZ3), mRNA   |
| NM_016538 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 7 (S. cerevisiae) (SIRT7), mRNA               |
| NM_016539 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 6 (S. cerevisiae) (SIRT6), mRNA               |
| NM_016316 | Homo sapiens REV1-like (yeast) (REV1L), mRNA   |
| NM_016138 | Homo sapiens COQ7 coenzyme Q, 7 homolog ubiquinone (yeast) (COQ7), mRNA  |
| NM_016583 | Homo sapiens palate, lung and nasal epithelium carcinoma associated (PLUNC), mRNA                                      |
| NM_015886 | Homo sapiens protease inhibitor 15 (PI15), mRNA  |
| NM_016067 | Homo sapiens mitochondrial ribosomal protein S18C (MRPS18C), nuclear gene encoding mitochondrial protein, mRNA         |
| NM_015946 | Homo sapiens pelota homolog (Drosophila) (PELO), mRNA  |
| NM_016397 | Homo sapiens TH1-like (Drosophila) (TH1L), mRNA  |
| NM_016587 | Homo sapiens chromobox homolog 3 (HP1 gamma homolog, Drosophila) (CBX3), mRNA  |
| NM_016347 | Homo sapiens putative N-acetyltransferase Camello 2 (CML2), mRNA   |
| NM_015727 | Homo sapiens tachykinin receptor 1 (TACR1), transcript variant short, mRNA   |
| NM_001058 | Homo sapiens tachykinin receptor 1 (TACR1), transcript variant long, mRNA  |
| NM_004052 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 3 (BNIP3), nuclear gene encoding mitochondrial protein, mRNA |
| NM_014820 | Homo sapiens translocase of outer mitochondrial membrane 70 homolog A (yeast) (TOMM70A), mRNA                          |
| NM_014918 | Homo sapiens carbohydrate (chondroitin) synthase 1 (CHSY1), mRNA   |
| NM_014707 | Homo sapiens histone deacetylase 9 (HDAC9-PENDING), transcript variant 3, mRNA   |
| NM_014683 | Homo sapiens unc-51-like kinase 2 (C. elegans) (ULK2), mRNA  |

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| NM_014874 | Homo sapiens mitofusin 2 (MFN2), mRNA  |
| NM_014071 | Homo sapiens nuclear receptor coactivator 6 (NCOA6), mRNA  |
| NM_015700 | Homo sapiens HIRA interacting protein 5 (HIRIP5), mRNA   |
| NM_015685 | Homo sapiens syndecan binding protein (syntenin) 2 (SDCBP2), mRNA  |
| NM_014263 | Homo sapiens YME1-like 1 (S. cerevisiae) (YME1L1), mRNA  |
| NM_014297 | Homo sapiens protein expressed in thyroid (YF13H12), mRNA  |
| NM_014393 | Homo sapiens staufer, RNA binding protein, homolog 2 (Drosophila) (STAU2), mRNA  |
| NM_014403 | Homo sapiens sialyltransferase 7D ((alpha-N-acetylneuraminyl-2,3-beta-galactosyl-1,3)-N-acetyl galactosaminide alpha-2,6-sialyltransferase) (SIAT7D), mRNA |
| NM_014465 | Homo sapiens sulfotransferase family, cytosolic, 1B, member 1 (SULT1B1), mRNA  |
| NM_014485 | Homo sapiens prostaglandin D2 synthase, hematopoietic (PGDS), mRNA   |
| NM_014303 | Homo sapiens pescadillo homolog 1, containing BRCT domain (zebrafish) (PES1), mRNA   |
| NM_014253 | Homo sapiens odz, odd Oz/ten-m homolog 1(Drosophila) (ODZ1), mRNA  |
| NM_014429 | Homo sapiens microrchidia homolog (mouse) (MORC), mRNA   |
| NM_006439 | Homo sapiens mab-21-like 2 (C. elegans) (MAB21L2), mRNA  |
| NM_015322 | Homo sapiens fem-1 homolog b (C. elegans) (FEM1B), mRNA  |
| NM_014591 | Homo sapiens Kv channel interacting protein 2 (KCNIP2), mRNA   |
| NM_004449 | Homo sapiens v-ets erythroblastosis virus E26 oncogene like (avian) (ERG), mRNA  |
| NM_014420 | Homo sapiens dickkopf homolog 4 (Xenopus laevis) (DKK4), mRNA  |
| NM_014421 | Homo sapiens dickkopf homolog 2 (Xenopus laevis) (DKK2), mRNA  |
| NM_014325 | Homo sapiens coronin, actin binding protein, 1C (CORO1C), mRNA   |
| NM_014246 | Homo sapiens cadherin, EGF LAG seven-pass G-type receptor 1 (flamingo homolog, Drosophila) (CELSR1), mRNA  |
| NM_014391 | Homo sapiens cardiac ankyrin repeat protein (CARP), mRNA   |
| NM_014336 | Homo sapiens aryl hydrocarbon receptor interacting protein-like 1 (AIP1), mRNA   |
| NM_014265 | Homo sapiens a disintegrin and metalloproteinase domain 28 (ADAM28), transcript variant 1, mRNA  |
| NM_014237 | Homo sapiens a disintegrin and metalloproteinase domain 18 (ADAM18), mRNA  |
| NM_005032 | Homo sapiens plastin 3 (T isoform) (PLS3), mRNA  |
| NM_013980 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 1 (BNIP1), transcript variant BNIP1-c, mRNA  |
| NM_013979 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 1 (BNIP1), transcript variant BNIP1-b, mRNA  |
| NM_013978 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 1 (BNIP1), transcript variant BNIP1-a, mRNA  |
| NM_004178 | Homo sapiens TAR (HIV) RNA binding protein 2 (TARBP2), mRNA  |
| NM_005915 | Homo sapiens MCM6 minichromosome maintenance deficient 6 (MIS5 homolog, S. pombe) (S. cerevisiae) (MCM6), mRNA   |
| NM_002576 | Homo sapiens p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast) (PAK1), mRNA   |
| NM_012091 | Homo sapiens adenosine deaminase, tRNA-specific 1 (ADAT1), mRNA  |
| NM_005358 | Homo sapiens LIM domain only 7 (LMO7), mRNA  |
| NM_013451 | Homo sapiens fer-1-like 3, myoferlin (C. elegans) (FER1L3), mRNA   |
| NM_006113 | Homo sapiens vav 3 oncogene (VAV3), mRNA   |
| NM_003869 | Homo sapiens carboxylesterase 2 (intestine, liver) (CES2), mRNA  |

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| NM_005721 | Homo sapiens ARP3 actin-related protein 3 homolog (yeast) (ACTR3), mRNA   |
| NM_003325 | Homo sapiens HIR histone cell cycle regulation defective homolog A (S. cerevisiae) (HIRA), mRNA                   |
| NM_012242 | Homo sapiens dickkopf homolog 1 (Xenopus laevis) (DKK1), mRNA   |
| NM_012429 | Homo sapiens SEC14-like 2 (S. cerevisiae) (SEC14L2), mRNA   |
| NM_012190 | Homo sapiens formyltetrahydrofolate dehydrogenase (FTHFD), mRNA   |
| NM_005069 | Homo sapiens single-minded homolog 2 (Drosophila) (SIM2), transcript variant SIM2, mRNA                           |
| NM_009586 | Homo sapiens single-minded homolog 2 (Drosophila) (SIM2), transcript variant SIM2s, mRNA                          |
| NM_002610 | Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 1 (PDK1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_013374 | Homo sapiens programmed cell death 6 interacting protein (PDCD6IP), mRNA  |
| NM_013367 | Homo sapiens anaphase-promoting complex subunit 4 (APC4), mRNA  |
| NM_002968 | Homo sapiens sal-like 1 (Drosophila) (SALL1), mRNA  |
| NM_002449 | Homo sapiens msh homeo box homolog 2 (Drosophila) (MSX2), mRNA  |
| NM_006739 | Homo sapiens MCM5 minichromosome maintenance deficient 5, cell division cycle 46 (S. cerevisiae) (MCM5), mRNA     |
| NM_012460 | Homo sapiens translocase of inner mitochondrial membrane 9 homolog (yeast) (TIMM9), mRNA                          |
| NM_012457 | Homo sapiens translocase of inner mitochondrial membrane 13 homolog A (yeast) (TIMM13A), mRNA                     |
| NM_012456 | Homo sapiens translocase of inner mitochondrial membrane 10 homolog (yeast) (TIMM10), mRNA                        |
| NM_012450 | Homo sapiens solute carrier family 13 (sodium/sulfate symporters), member 4 (SLC13A4), mRNA                       |
| NM_012444 | Homo sapiens SPO11 meiotic protein covalently bound to DSB-like (S. cerevisiae) (SPO11), mRNA                     |
| NM_012240 | Homo sapiens sirtuin silent mating type information regulation 2 homolog 4 (S. cerevisiae) (SIRT4), mRNA          |
| NM_012387 | Homo sapiens peptidyl arginine deiminase, type V (PAD), mRNA  |
| NM_012381 | Homo sapiens origin recognition complex, subunit 3-like (yeast) (ORC3L), mRNA                                     |
| NM_012225 | Homo sapiens nucleotide binding protein 2 (MinD homolog, E. coli) (NUBP2), mRNA                                   |
| NM_012222 | Homo sapiens mutY homolog (E. coli) (MUTYH), mRNA   |
| NM_012279 | Homo sapiens double-stranded RNA-binding zinc finger protein JAZ (JAZ), mRNA                                      |
| NM_012206 | Homo sapiens hepatitis A virus cellular receptor 1 (HAVCR-1), mRNA  |
| NM_012205 | Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA   |
| NM_012198 | Homo sapiens grancalcin, EF-hand calcium binding protein (GCA), mRNA  |
| NM_012193 | Homo sapiens frizzled homolog 4 (Drosophila) (FZD4), mRNA   |
| NM_012192 | Homo sapiens fracture callus 1 homolog (rat) (FXC1), mRNA   |
| NM_012076 | Homo sapiens crumbs homolog 1 (Drosophila) (CRB1), mRNA   |
| NM_012124 | Homo sapiens cysteine and histidine-rich domain (CHORD)-containing, zinc binding protein 1 (CHORDC1), mRNA        |
| NM_012118 | Homo sapiens CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCRN4L), mRNA                              |
| NM_012117 | Homo sapiens chromobox homolog 5 (HPI alpha homolog, Drosophila) (CBX5), mRNA                                     |
| NM_012108 | Homo sapiens BCR downstream signaling 1 (BRDG1), mRNA   |
| NM_012100 | Homo sapiens aspartyl aminopeptidase (DNPEP), mRNA  |

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| NM_012094 | Homo sapiens peroxiredoxin 5 (PRDX5), mRNA   |
| NM_004506 | Homo sapiens heat shock transcription factor 2 (HSF2), mRNA  |
| NM_004423 | Homo sapiens dishevelled, dsh homolog 3 (Drosophila) (DVL3), mRNA  |
| NM_007374 | Homo sapiens sine oculis homeobox homolog 6 (Drosophila) (SIX6), mRNA  |
| NM_007373 | Homo sapiens soc-2 suppressor of clear homolog (C. elegans) (SHOC2), mRNA  |
| NM_002388 | Homo sapiens MCM3 minichromosome maintenance deficient 3 (S. cerevisiae) (MCM3), mRNA  |
| NM_004873 | Homo sapiens BCL2-associated athanogene 5 (BAG5), mRNA   |
| NM_007316 | Homo sapiens agouti related protein homolog (mouse) (AGRP), transcript variant 2, mRNA   |
| NM_003819 | Homo sapiens poly(A) binding protein, cytoplasmic 4 (inducible form) (PABPC4), mRNA  |
| NM_005737 | Homo sapiens ADP-ribosylation factor-like 7 (ARL7), mRNA   |
| NM_002358 | Homo sapiens MAD2 mitotic arrest deficient-like 1 (yeast) (MAD2L1), mRNA   |
| NM_007264 | Homo sapiens adrenomedullin receptor (ADMR), mRNA  |
| NM_006870 | Homo sapiens destrin (actin depolymerizing factor) (DSTN), mRNA  |
| NM_005476 | Homo sapiens UDP-N-acetylglucosamine-2-epimerase/N-acetylmannosamine kinase (GNE), mRNA  |
| NM_007309 | Homo sapiens diaphanous homolog 2 (Drosophila) (DIAPH2), transcript variant 12C, mRNA  |
| NM_001878 | Homo sapiens cellular retinoic acid binding protein 2 (CRABP2), mRNA   |
| NM_000489 | Homo sapiens alpha thalassemia/mental retardation syndrome X-linked (RAD54 homolog, S. cerevisiae) (ATRX), mRNA                          |
| NM_002528 | Homo sapiens nth endonuclease III-like 1 (E. coli) (NTHL1), mRNA   |
| NM_004085 | Homo sapiens translocase of inner mitochondrial membrane 8 homolog A (yeast) (TIMM8A), nuclear gene encoding mitochondrial protein, mRNA |
| NM_002310 | Homo sapiens leukemia inhibitory factor receptor (LIFR), mRNA  |
| NM_004733 | Homo sapiens acetyl-Coenzyme A transporter (ACATN), mRNA   |
| NM_002657 | Homo sapiens pleiomorphic adenoma gene-like 2 (PLAGL2), mRNA   |
| NM_006724 | Homo sapiens mitogen-activated protein kinase kinase kinase 4 (MAP3K4), transcript variant 2, mRNA                                       |
| NM_006882 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2e, mRNA              |
| NM_006881 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2d, mRNA              |
| NM_006880 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2c, mRNA              |
| NM_006879 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2b, mRNA              |
| NM_006878 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2a, mRNA              |
| NM_003801 | Homo sapiens GPAA1P anchor attachment protein 1 homolog (yeast) (GPAA1), mRNA  |
| NM_003193 | Homo sapiens tubulin-specific chaperone e (TBCE), mRNA   |
| NM_002370 | Homo sapiens mago-nashi homolog, proliferation-associated (Drosophila) (MAGOH), mRNA   |
| NM_006341 | Homo sapiens MAD2 mitotic arrest deficient-like 2 (yeast) (MAD2L2), mRNA   |
| NM_006149 | Homo sapiens lectin, galactoside-binding, soluble, 4 (galectin 4) (LGALS4), mRNA   |
| NM_003585 | Homo sapiens double C2-like domains, beta (DOC2B), mRNA  |
| NM_007129 | Homo sapiens Zic family member 2 (odd-paired homolog, Drosophila) (ZIC2), mRNA   |



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| NM_007279 | Homo sapiens U2 small nuclear ribonucleoprotein auxiliary factor (65kD) (U2AF65), mRNA                              |
| NM_007194 | Homo sapiens CHK2 checkpoint homolog (S. pombe) (CHEK2), mRNA   |
| NM_007271 | Homo sapiens serine/threonine kinase 38 (STK38), mRNA   |
| NM_007232 | Homo sapiens histamine receptor H3 (HRH3), mRNA   |
| NM_007278 | Homo sapiens GABA(A) receptor-associated protein (GABARAP), mRNA  |
| NM_007197 | Homo sapiens frizzled homolog 10 (Drosophila) (FZD10), mRNA   |
| NM_007246 | Homo sapiens kelch-like 2, Mayven (Drosophila) (KLHL2), mRNA  |
| NM_001466 | Homo sapiens frizzled homolog 2 (Drosophila) (FZD2), mRNA   |
| NM_006482 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2 (DYRK2), transcript variant 2, mRNA   |
| NM_003583 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2 (DYRK2), transcript variant 1, mRNA   |
| NM_006484 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1B (DYRK1B), transcript variant c, mRNA |
| NM_006483 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1B (DYRK1B), transcript variant b, mRNA |
| NM_001882 | Homo sapiens corticotropin releasing hormone binding protein (CRHBP), mRNA  |
| NM_005889 | Homo sapiens apolipoprotein B mRNA editing enzyme, catalytic polypeptide 1 (APOBEC1), transcript variant 2, mRNA    |
| NM_001644 | Homo sapiens apolipoprotein B mRNA editing enzyme, catalytic polypeptide 1 (APOBEC1), transcript variant 1, mRNA    |
| NM_006936 | Homo sapiens SMT3 suppressor of mif two 3 homolog 1 (yeast) (SMT3H1), mRNA  |
| NM_006912 | Homo sapiens Ric-like, expressed in many tissues (Drosophila) (RIT), mRNA   |
| NM_006910 | Homo sapiens retinoblastoma binding protein 6 (RBBP6), mRNA   |
| NM_007068 | Homo sapiens DMC1 dosage suppressor of mck1 homolog, meiosis-specific homologous recombination (yeast) (DMC1), mRNA |
| NM_007021 | Homo sapiens decidual protein induced by progesterone (DEPP), mRNA  |
| NM_007007 | Homo sapiens cleavage and polyadenylation specific factor 6, 68kD subunit (CPSF6), mRNA                             |
| NM_006822 | Homo sapiens GTP-binding protein homologous to Saccharomyces cerevisiae SEC4 (SEC4L), mRNA                          |
| NM_006843 | Homo sapiens serine dehydratase (SDS), mRNA   |
| NM_006746 | Homo sapiens sex comb on midleg-like 1 (Drosophila) (SCML1), mRNA   |
| NM_006824 | Homo sapiens EBNA1 binding protein 2 (EBNA1BP2), mRNA   |
| NM_005922 | Homo sapiens mitogen-activated protein kinase kinase kinase 4 (MAP3K4), transcript variant 1, mRNA                  |
| NM_006807 | Homo sapiens chromobox homolog 1 (HP1 beta homolog Drosophila ) (CBX1), mRNA  |
| NM_006734 | Homo sapiens human immunodeficiency virus type I enhancer binding protein 2 (HIVEP2), mRNA                          |
| NM_006732 | Homo sapiens FBJ murine osteosarcoma viral oncogene homolog B (FOSB), mRNA  |
| NM_006729 | Homo sapiens diaphanous homolog 2 (Drosophila) (DIAPH2), transcript variant 156, mRNA                               |
| NM_006829 | Homo sapiens adipose specific 2 (APM2), mRNA  |
| NM_006872 | Homo sapiens TFIIA-alpha/beta-like factor (ALF), mRNA   |
| NM_006796 | Homo sapiens AFG3 ATPase family gene 3-like 2 (yeast) (AFG3L2), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_006544 | Homo sapiens SEC10-like 1 (S. cerevisiae) (SEC10L1), mRNA   |

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| NM_006666 | Homo sapiens RuvB-like 2 (E. coli) (RUVBL2), mRNA  |
| NM_006509 | Homo sapiens v-rel reticuloendotheliosis viral oncogene homolog B, nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (avian) (RELB), mRNA |
| NM_006606 | Homo sapiens retinoblastoma binding protein 9 (RBBP9), mRNA  |
| NM_006620 | Homo sapiens HBS1-like (S. cerevisiae) (HBS1L), mRNA   |
| NM_006561 | Homo sapiens CUG triplet repeat, RNA binding protein 2 (CUGBP2), mRNA  |
| NM_006579 | Homo sapiens emopamil binding protein (sterol isomerase) (EBP), mRNA   |
| NM_006560 | Homo sapiens CUG triplet repeat, RNA binding protein 1 (CUGBP1), mRNA  |
| NM_001211 | Homo sapiens BUB1 budding uninhibited by benzimidazoles 1 homolog beta (yeast) (BUB1B), mRNA   |
| NM_006374 | Homo sapiens serine/threonine kinase 25 (STE20 homolog, yeast) (STK25), mRNA   |
| NM_006377 | Homo sapiens unc-13-like (C. elegans) (UNC13), mRNA  |
| NM_006357 | Homo sapiens ubiquitin-conjugating enzyme E2E 3 (UBC4/5 homolog, yeast) (UBE2E3), mRNA   |
| NM_006323 | Homo sapiens SEC24 related gene family, member B (S. cerevisiae) (SEC24B), mRNA  |
| NM_006364 | Homo sapiens Sec23 homolog A (S. cerevisiae) (SEC23A), mRNA  |
| NM_006272 | Homo sapiens S100 calcium binding protein, beta (neural) (S100B), mRNA   |
| NM_006271 | Homo sapiens S100 calcium binding protein A1 (S100A1), mRNA  |
| NM_006391 | Homo sapiens RAN binding protein 7 (RANBP7), mRNA  |
| NM_006265 | Homo sapiens RAD21 homolog (S. pombe) (RAD21), mRNA  |
| NM_006203 | Homo sapiens phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3 duncce homolog, Drosophila) (PDE4D), mRNA   |
| NM_006202 | Homo sapiens phosphodiesterase 4A, cAMP-specific (phosphodiesterase E2 duncce homolog, Drosophila) (PDE4A), mRNA   |
| NM_006190 | Homo sapiens origin recognition complex, subunit 2-like (yeast) (ORC2L), mRNA  |
| NM_006181 | Homo sapiens netrin 2-like (chicken) (NTN2L), mRNA   |
| NM_006168 | Homo sapiens NK6 transcription factor homolog A (Drosophila) (NKX6A), mRNA   |
| NM_006167 | Homo sapiens NK3 transcription factor homolog A (Drosophila) (NKX3A), mRNA   |
| NM_006159 | Homo sapiens NEL-like 2 (chicken) (NELL2), mRNA  |
| NM_006157 | Homo sapiens NEL-like 1 (chicken) (NELL1), mRNA  |
| NM_005360 | Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) (MAF), mRNA  |
| NM_006306 | Homo sapiens SMC1 structural maintenance of chromosomes 1-like 1 (yeast) (SMC1L1), mRNA  |
| NM_006461 | Homo sapiens mitotic spindle coiled-coil related protein (DEEPEST), mRNA   |
| NM_006314 | Homo sapiens connector enhancer of KSR-like (Drosophila kinase suppressor of ras) (CNK1), mRNA   |
| NM_006366 | Homo sapiens adenylyl cyclase-associated protein 2 (CAP2), mRNA  |
| NM_006444 | Homo sapiens SMC2 structural maintenance of chromosomes 2-like 1 (yeast) (SMC2L1), mRNA  |
| NM_006321 | Homo sapiens ariadne homolog 2 (Drosophila) (ARIH2), mRNA  |
| NM_006406 | Homo sapiens peroxiredoxin 4 (PRDX4), mRNA   |
| NM_006334 | Homo sapiens olfactomedin 1 (OLFM1), transcript variant 2, mRNA  |
| NM_004032 | Homo sapiens D-aspartate oxidase (DDO), transcript variant 2, mRNA   |
| NM_005985 | Homo sapiens snail 1 homolog, zinc finger protein (Drosophila) (SNAI1), mRNA   |

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| NM_006109 | Homo sapiens SKB1 homolog (S. pombe) (SKB1), mRNA  |
| NM_005982 | Homo sapiens sine oculis homeobox homolog 1 (Drosophila) (SIX1), mRNA  |
| NM_006089 | Homo sapiens sex comb on midleg-like 2 (Drosophila) (SCML2), mRNA  |
| NM_005980 | Homo sapiens S100 calcium binding protein P (S100P), mRNA  |
| NM_005979 | Homo sapiens S100 calcium binding protein A13 (S100A13), mRNA  |
| NM_005938 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 7 (MLLT7), mRNA  |
| NM_005937 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6 (MLLT6), mRNA  |
| NM_005936 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4 (MLLT4), mRNA  |
| NM_005935 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 2 (MLLT2), mRNA  |
| NM_005934 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 1 (MLLT1), mRNA  |
| NM_005933 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila) (MLL), mRNA  |
| NM_005905 | Homo sapiens MAD, mothers against decapentaplegic homolog 9 (Drosophila) (MADH9), mRNA   |
| NM_005904 | Homo sapiens MAD, mothers against decapentaplegic homolog 7 (Drosophila) (MADH7), mRNA   |
| NM_005903 | Homo sapiens MAD, mothers against decapentaplegic homolog 5 (Drosophila) (MADH5), mRNA   |
| NM_005902 | Homo sapiens MAD, mothers against decapentaplegic homolog 3 (Drosophila) (MADH3), mRNA   |
| NM_005901 | Homo sapiens MAD, mothers against decapentaplegic homolog 2 (Drosophila) (MADH2), mRNA   |
| NM_005900 | Homo sapiens MAD, mothers against decapentaplegic homolog 1 (Drosophila) (MADH1), mRNA   |
| NM_006033 | Homo sapiens lipase, endothelial (LIPG), mRNA  |
| NM_006048 | Homo sapiens ubiquitination factor E4B (UFD2 homolog, yeast) (UBE4B), mRNA   |
| NM_006111 | Homo sapiens acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase) (ACAA2), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_006012 | Homo sapiens ClpP caseinolytic protease, ATP-dependent, proteolytic subunit homolog (E. coli) (CLPP), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_006110 | Homo sapiens CD2 antigen (cytoplasmic tail) binding protein 2 (CD2BP2), mRNA   |
| NM_006017 | Homo sapiens prominin-like 1 (mouse) (PROML1), mRNA  |
| NM_004010 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427p2, mRNA |
| NM_004023 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp140bc, mRNA |
| NM_004022 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant D140ab, mRNA  |
| NM_004021 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp140b, mRNA  |

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| NM_004020 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp140c, mRNA  |
| NM_004019 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp40, mRNA    |
| NM_004018 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp71ab, mRNA  |
| NM_004017 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp71a, mRNA   |
| NM_004016 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp71b, mRNA   |
| NM_004015 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp71, mRNA    |
| NM_004014 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp116, mRNA   |
| NM_004013 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp140, mRNA   |
| NM_004012 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp260-2, mRNA |
| NM_004011 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp260-1, mRNA |
| NM_004009 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427p1, mRNA |
| NM_004007 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427l, mRNA  |
| NM_004006 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA  |
| NM_000109 | Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427c, mRNA  |
| NM_005657 | Homo sapiens tumor protein p53 binding protein, 1 (TP53BP1), mRNA  |
| NM_005632 | Homo sapiens small optic lobes homolog (Drosophila) (SOLH), mRNA   |
| NM_005631 | Homo sapiens smoothened homolog (Drosophila) (SMOH), mRNA  |
| NM_005621 | Homo sapiens S100 calcium binding protein A12 (calgranulin C) (S100A12), mRNA  |
| NM_005620 | Homo sapiens S100 calcium binding protein A11 (calgizzarin) (S100A11), mRNA  |
| NM_005610 | Homo sapiens retinoblastoma binding protein 4 (RBBP4), mRNA  |
| NM_005732 | Homo sapiens RAD50 homolog (S. cerevisiae) (RAD50), mRNA   |
| NM_005591 | Homo sapiens MRE11 meiotic recombination 11 homolog A (S. cerevisiae) (MRE11A), mRNA   |

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| NM_005590 | Homo sapiens MRE11 meiotic recombination 11 homolog A (S. cerevisiae) (MRE11A), mRNA   |
| NM_005585 | Homo sapiens MAD, mothers against decapentaplegic homolog 6 (Drosophila) (MADH6), mRNA                                       |
| NM_005584 | Homo sapiens mab-21-like 1 (C. elegans) (MAB21L1), mRNA  |
| NM_005582 | Homo sapiens lymphocyte antigen 64 homolog, radioprotective 105kD (mouse) (LY64), mRNA                                       |
| NM_005667 | Homo sapiens zinc finger protein 103 homolog (mouse) (ZFP103), mRNA  |
| NM_005886 | Homo sapiens katanin p80 (WD40-containing) subunit B 1 (KATNB1), mRNA  |
| NM_005860 | Homo sapiens follistatin-like 3 (secreted glycoprotein) (FSTL3), mRNA  |
| NM_005758 | Homo sapiens heterogeneous nuclear ribonucleoprotein A3 (HNRPA3), mRNA   |
| NM_005510 | Homo sapiens dom-3 homolog Z (C. elegans) (DOM3Z), transcript variant 2, mRNA  |
| NM_005766 | Homo sapiens FERM, RhoGEF (ARHGEF) and pleckstrin domain protein 1 (chondrocyte-derived) (FARP1), mRNA                       |
| NM_005722 | Homo sapiens ARP2 actin-related protein 2 homolog (yeast) (ACTR2), mRNA  |
| NM_005750 | Homo sapiens chromosome 4 open reading frame 6 (C4orf6), mRNA  |
| NM_005170 | Homo sapiens achaete-scute complex-like 2 (Drosophila) (ASCL2), mRNA   |
| NM_005426 | Homo sapiens tumor protein p53 binding protein, 2 (TP53BP2), mRNA  |
| NM_005486 | Homo sapiens target of myb1-like 1 (chicken) (TOM1L1), mRNA  |
| NM_005488 | Homo sapiens target of myb1 (chicken) (TOM1), mRNA   |
| NM_005417 | Homo sapiens v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) (SRC), mRNA                                   |
| NM_005413 | Homo sapiens sine oculis homeobox homolog 3 (Drosophila) (SIX3), mRNA  |
| NM_005444 | Homo sapiens RCD1 required for cell differentiation1 homolog (S. pombe) (RQCD1), mRNA  |
| NM_005378 | Homo sapiens v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) (MYCN), mRNA                       |
| NM_005377 | Homo sapiens v-myc myelocytomatosis viral oncogene homolog 2 (avian) (MYCL2), mRNA   |
| NM_005375 | Homo sapiens v-myb myeloblastosis viral oncogene homolog (avian) (MYB), mRNA   |
| NM_005359 | Homo sapiens MAD, mothers against decapentaplegic homolog 4 (Drosophila) (MADH4), mRNA                                       |
| NM_005340 | Homo sapiens histidine triad nucleotide binding protein (HINT), mRNA   |
| NM_005307 | Homo sapiens G protein-coupled receptor kinase 2-like (Drosophila) (GPRK2L), mRNA  |
| NM_005262 | Homo sapiens growth factor, augments liver regeneration (ERV1 homolog, S. cerevisiae) (GFER), mRNA                           |
| NM_005261 | Homo sapiens GTP binding protein overexpressed in skeletal muscle (GEM), mRNA  |
| NM_005257 | Homo sapiens GATA binding protein 6 (GATA6), mRNA  |
| NM_005245 | Homo sapiens FAT tumor suppressor homolog 1 (Drosophila) (FAT), mRNA   |
| NM_005244 | Homo sapiens eyes absent homolog 2 (Drosophila) (EYA2), mRNA   |
| NM_005239 | Homo sapiens v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2), mRNA  |
| NM_005235 | Homo sapiens v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian) (ERBB4), mRNA                                  |
| NM_005228 | Homo sapiens epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) (EGFR), mRNA |
| NM_005224 | Homo sapiens dead ringer-like 1 (Drosophila) (DRIL1), mRNA   |
| NM_005219 | Homo sapiens diaphanous homolog 1 (Drosophila) (DIAPH1), mRNA  |

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| NM_005207 | Homo sapiens v-crk sarcoma virus CT10 oncogene homolog (avian)-like (CRKL), mRNA  |
| NM_005197 | Homo sapiens checkpoint suppressor 1 (CHES1), mRNA  |
| NM_005454 | Homo sapiens cerberus 1 homolog, cysteine knot superfamily (Xenopus laevis) (CER1), mRNA                                  |
| NM_005496 | Homo sapiens SMC4 structural maintenance of chromosomes 4-like 1 (yeast) (SMC4L1), mRNA                                   |
| NM_005169 | Homo sapiens aristaless homeobox (Drosophila) (ARIX), mRNA  |
| NM_005078 | Homo sapiens transducin-like enhancer of split 3 (E(sp1) homolog, Drosophila) (TLE3), mRNA                                |
| NM_005077 | Homo sapiens transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila) (TLE1), mRNA                                |
| NM_005068 | Homo sapiens single-minded homolog 1 (Drosophila) (SIM1), mRNA  |
| NM_005067 | Homo sapiens seven in absentia homolog 2 (Drosophila) (SLAH2), mRNA   |
| NM_005138 | Homo sapiens SCO cytochrome oxidase deficient homolog 2 (yeast) (SCO2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_005156 | Homo sapiens ROD1 regulator of differentiation 1 (S. pombe) (ROD1), mRNA  |
| NM_005133 | Homo sapiens RCE1 homolog, prenyl protein protease (S. cerevisiae) (RCE1), mRNA   |
| NM_005057 | Homo sapiens retinoblastoma binding protein 5 (RBBP5), mRNA   |
| NM_005056 | Homo sapiens retinoblastoma binding protein 2 (RBBP2), mRNA   |
| NM_005053 | Homo sapiens RAD23 homolog A (S. cerevisiae) (RAD23A), mRNA   |
| NM_005049 | Homo sapiens PWP2 periodic tryptophan protein homolog (yeast) (PWP2H), mRNA   |
| NM_005008 | Homo sapiens NHP2 non-histone chromosome protein 2-like 1 (S. cerevisiae) (NHP2L1), mRNA                                  |
| NM_004997 | Homo sapiens myosin binding protein H (MYBPH), mRNA   |
| NM_004677 | Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA   |
| NM_004788 | Homo sapiens ubiquitination factor E4A (UFD2 homolog, yeast) (UBE4A), mRNA  |
| NM_004617 | Homo sapiens transmembrane 4 superfamily member 4 (TM4SF4), mRNA  |
| NM_004607 | Homo sapiens tubulin-specific chaperone a (TBCA), mRNA  |
| NM_004602 | Homo sapiens staufen, RNA binding protein (Drosophila) (STAU), transcript variant T4, mRNA                                |
| NM_004653 | Homo sapiens Smcy homolog, Y chromosome (mouse) (SMCY), mRNA  |
| NM_004787 | Homo sapiens slit homolog 2 (Drosophila) (SLIT2), mRNA  |
| NM_004593 | Homo sapiens splicing factor, arginine/serine-rich 10 (transformer 2 homolog, Drosophila) (SFRS10), mRNA                  |
| NM_004206 | Homo sapiens vesicle trafficking protein (SEC22C), transcript variant 2, mRNA   |
| NM_004657 | Homo sapiens serum deprivation response (phosphatidylserine binding protein) (SDPR), mRNA                                 |
| NM_004589 | Homo sapiens SCO cytochrome oxidase deficient homolog 1 (yeast) (SCO1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004587 | Homo sapiens ribosome binding protein 1 homolog 180kD (dog) (RRBP1), mRNA   |
| NM_004164 | Homo sapiens retinol binding protein 2, cellular (RBP2), mRNA   |
| NM_004584 | Homo sapiens RAD9 homolog (S. pombe) (RAD9), mRNA   |
| NM_004794 | Homo sapiens RAB33A, member RAS oncogene family (RAB33A), mRNA  |
| NM_004813 | Homo sapiens peroxisomal biogenesis factor 16 (PEX16), transcript variant 1, mRNA   |
| NM_004564 | Homo sapiens PET112-like (yeast) (PET112L), mRNA  |
| NM_004643 | Homo sapiens poly(A) binding protein, nuclear 1 (PABPN1), mRNA  |

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| NM_004561 | Homo sapiens ovo-like 1(Drosophila) (OVOL1), mRNA  |
| NM_004153 | Homo sapiens origin recognition complex, subunit 1-like (yeast) (ORC1L), mRNA  |
| NM_004557 | Homo sapiens Notch homolog 4 (Drosophila) (NOTCH4), mRNA   |
| NM_004808 | Homo sapiens N-myristoyltransferase 2 (NMT2), mRNA   |
| NM_004210 | Homo sapiens neuralized-like (Drosophila) (NEURL), mRNA  |
| NM_004147 | Homo sapiens developmentally regulated GTP binding protein 1 (DRG1), mRNA  |
| NM_004851 | Homo sapiens pronapsin A (NAP1), mRNA  |
| NM_004533 | Homo sapiens myosin binding protein C, fast type (MYBPC2), mRNA  |
| NM_004529 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 (MLLT3), mRNA                    |
| NM_004668 | Homo sapiens maltase-glucoamylase (alpha-glucosidase) (MGAM), mRNA   |
| NM_004526 | Homo sapiens MCM2 minichromosome maintenance deficient 2, mitotin (S. cerevisiae) (MCM2), mRNA   |
| NM_004829 | Homo sapiens lymphocyte antigen 94 homolog, activating NK-receptor; NK-p46, (mouse) (LY94), mRNA   |
| NM_004744 | Homo sapiens lecithin retinol acyltransferase (phosphatidylcholine--retinol O-acyltransferase) (LRAT), mRNA                                  |
| NM_004524 | Homo sapiens lethal giant larvae homolog 2 (Drosophila) (LLGL2), mRNA  |
| NM_004140 | Homo sapiens lethal giant larvae homolog 1 (Drosophila) (LLGL1), mRNA  |
| NM_004922 | Homo sapiens SEC24 related gene family, member C (S. cerevisiae) (SEC24C), mRNA  |
| NM_004508 | Homo sapiens isopentenyl-diphosphate delta isomerase (IDI1), mRNA  |
| NM_004507 | Homo sapiens HUS1 checkpoint homolog (S. pombe) (HUS1), mRNA   |
| NM_004262 | Homo sapiens airway trypsin-like protease (HAT), mRNA  |
| NM_004752 | Homo sapiens glial cells missing homolog b (Drosophila) (GCMB), mRNA   |
| NM_004477 | Homo sapiens FSHD region gene 1 (FRG1), mRNA   |
| NM_004463 | Homo sapiens faciogenital dysplasia (Aarskog-Scott syndrome) (FGD1), mRNA  |
| NM_004106 | Homo sapiens Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide (FCER1G), mRNA   |
| NM_004456 | Homo sapiens enhancer of zeste homolog 2 (Drosophila) (EZH2), mRNA   |
| NM_004100 | Homo sapiens eyes absent homolog 4 (Drosophila) (EYA4), mRNA   |
| NM_004450 | Homo sapiens enhancer of rudimentary homolog (Drosophila) (ERH), mRNA  |
| NM_004448 | Homo sapiens v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) (ERBB2), mRNA    |
| NM_004445 | Homo sapiens EphB6 (EPHB6), mRNA   |
| NM_004436 | Homo sapiens endosulfine alpha (ENSA), mRNA  |
| NM_004432 | Homo sapiens ELAV (embryonic lethal, abnormal vision, Drosophila)-like 2 (Hu antigen B) (ELAVL2), mRNA                                       |
| NM_004230 | Homo sapiens endothelial differentiation, sphingolipid G-protein-coupled receptor, 5 (EDG5), mRNA  |
| NM_004421 | Homo sapiens dishevelled, dsh homolog 1 (Drosophila) (DVL1), mRNA  |
| NM_004399 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, S. cerevisiae) (DDX11), transcript variant 2, mRNA |
| NM_004378 | Homo sapiens cellular retinoic acid binding protein 1 (CRABP1), mRNA   |
| NM_004898 | Homo sapiens clock homolog (mouse) (CLOCK), mRNA   |
| NM_004669 | Homo sapiens chloride intracellular channel 3 (CLIC3), mRNA  |
| NM_004066 | Homo sapiens centrin, EF-hand protein, 1 (CETN1), mRNA   |
| NM_004354 | Homo sapiens cyclin G2 (CCNG2), mRNA   |
| NM_004352 | Homo sapiens cerebellin 1 precursor (CBLN1), mRNA  |
| NM_004057 | Homo sapiens calbindin 3, (vitamin D-dependent calcium binding protein)  |

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|           | (CALB3), mRNA   |
| NM_004338 | Homo sapiens chromosome 18 open reading frame 1 (C18orf1), mRNA   |
| NM_004725 | Homo sapiens BUB3 budding uninhibited by benzimidazoles 3 homolog (yeast) (BUB3), mRNA                                      |
| NM_004336 | Homo sapiens BUB1 budding uninhibited by benzimidazoles 1 homolog (yeast) (BUB1), mRNA                                      |
| NM_004331 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 3-like (BNIP3L), mRNA   |
| NM_004328 | Homo sapiens BCS1-like (yeast) (BCS1L), mRNA  |
| NM_004045 | Homo sapiens ATX1 antioxidant protein 1 homolog (yeast) (ATOX1), mRNA   |
| NM_004849 | Homo sapiens APG5 autophagy 5-like (S. cerevisiae) (APG5L), mRNA  |
| NM_004674 | Homo sapiens ash2 (absent, small, or homeotic)-like (Drosophila) (ASH2L), mRNA  |
| NM_004316 | Homo sapiens achaete-scute complex-like 1 (Drosophila) (ASCL1), mRNA  |
| NM_004707 | Homo sapiens APG12 autophagy 12-like (S. cerevisiae) (APG12L), mRNA   |
| NM_004641 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 (MLLT10), mRNA |
| NM_004301 | Homo sapiens BAF53 (BAF53A), mRNA   |
| NM_001129 | Homo sapiens AE binding protein 1 (AEBP1), mRNA   |
| NM_003656 | Homo sapiens calcium/calmodulin-dependent protein kinase I (CAMK1), mRNA  |
| NM_000239 | Homo sapiens lysozyme (renal amyloidosis) (LYZ), mRNA   |
| NM_000456 | Homo sapiens sulfite oxidase (SUOX), nuclear gene encoding mitochondrial protein, mRNA                                      |
| NM_000435 | Homo sapiens Notch homolog 3 (Drosophila) (NOTCH3), mRNA  |
| NM_000251 | Homo sapiens mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli) (MSH2), mRNA                                       |
| NM_000249 | Homo sapiens mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1), mRNA                                       |
| NM_000210 | Homo sapiens integrin, alpha 6 (ITGA6), mRNA  |
| NM_001537 | Homo sapiens heat shock factor binding protein 1 (HSBP1), mRNA  |
| NM_001499 | Homo sapiens GLE1 RNA export mediator-like (yeast) (GLE1L), mRNA  |
| NM_001458 | Homo sapiens filamin C, gamma (actin binding protein 280) (FLNC), mRNA  |
| NM_001444 | Homo sapiens fatty acid binding protein 5 (psoriasis-associated) (FABP5), mRNA  |
| NM_001432 | Homo sapiens epiregulin (EREG), mRNA  |
| NM_001388 | Homo sapiens developmentally regulated GTP binding protein 2 (DRG2), mRNA   |
| NM_001340 | Homo sapiens cylicin, basic protein of sperm head cytoskeleton 2 (CYLC2), mRNA  |
| NM_001326 | Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kD (CSTF3), mRNA   |
| NM_001325 | Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kD (CSTF2), mRNA   |
| NM_001324 | Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 1, 50kD (CSTF1), mRNA   |
| NM_001255 | Homo sapiens CDC20 cell division cycle 20 homolog (S. cerevisiae) (CDC20), mRNA   |
| NM_001122 | Homo sapiens adipose differentiation-related protein (ADFP), mRNA   |
| NM_003413 | Homo sapiens Zic family member 3 heterotaxy 1 (odd-paired homolog, Drosophila) (ZIC3), mRNA                                 |
| NM_003412 | Homo sapiens Zic family member 1 (odd-paired homolog, Drosophila) (ZIC1), mRNA  |



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| NM_003408 | Homo sapiens zinc finger protein 37 homolog (mouse) (ZFP37), mRNA   |
| NM_003409 | Homo sapiens zinc finger protein 161 homolog (mouse) (ZFP161), mRNA   |
| NM_003680 | Homo sapiens tyrosyl-tRNA synthetase (YARS), mRNA   |
| NM_003390 | Homo sapiens WEE1+ homolog (S. pombe) (WEE1), mRNA  |
| NM_003565 | Homo sapiens unc-51-like kinase 1 (C. elegans) (ULK1), mRNA   |
| NM_003345 | Homo sapiens ubiquitin-conjugating enzyme E2I (UBC9 homolog, yeast) (UBE2I), mRNA   |
| NM_003344 | Homo sapiens ubiquitin-conjugating enzyme E2H (UBC8 homolog, yeast) (UBE2H), mRNA   |
| NM_003343 | Homo sapiens ubiquitin-conjugating enzyme E2G 2 (UBC7 homolog, yeast) (UBE2G2), mRNA  |
| NM_003340 | Homo sapiens ubiquitin-conjugating enzyme E2D 3 (UBC4/5 homolog, yeast) (UBE2D3), mRNA                                      |
| NM_003338 | Homo sapiens ubiquitin-conjugating enzyme E2D 1 (UBC4/5 homolog, yeast) (UBE2D1), mRNA                                      |
| NM_003968 | Homo sapiens ubiquitin-activating enzyme E1C (UBA3 homolog, yeast) (UBE1C), mRNA  |
| NM_003320 | Homo sapiens tubby homolog (mouse) (TUB), mRNA  |
| NM_003278 | Homo sapiens tetranectin (plasminogen binding protein) (TNA), mRNA  |
| NM_003260 | Homo sapiens transducin-like enhancer of split 2 (E(sp1) homolog, Drosophila) (TLE2), mRNA                                  |
| NM_003920 | Homo sapiens timeless homolog (Drosophila) (TIMELESS), mRNA   |
| NM_003251 | Homo sapiens thyroid hormone responsive (SPOT14 homolog, rat) (THRSP), mRNA   |
| NM_003250 | Homo sapiens thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) (THRA), mRNA |
| NM_003223 | Homo sapiens transcription factor AP-4 (activating enhancer binding protein 4) (TFAP4), mRNA                                |
| NM_003222 | Homo sapiens transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma) (TFAP2C), mRNA                   |
| NM_003221 | Homo sapiens transcription factor AP-2 beta (activating enhancer binding protein 2 beta) (TFAP2B), mRNA                     |
| NM_003220 | Homo sapiens transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha) (TFAP2A), mRNA                   |
| NM_000458 | Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), transcript variant a, mRNA      |
| NM_003181 | Homo sapiens T, brachyury homolog (mouse) (T), mRNA   |
| NM_003173 | Homo sapiens suppressor of variegation 3-9 homolog 1 (Drosophila) (SUV39H1), mRNA   |
| NM_003171 | Homo sapiens suppressor of var1, 3-like 1 (S. cerevisiae) (SUPV3L1), mRNA   |
| NM_003169 | Homo sapiens suppressor of Ty 5 homolog (S. cerevisiae) (SUPT5H), mRNA  |
| NM_003168 | Homo sapiens suppressor of Ty 4 homolog 1 (S. cerevisiae) (SUPT4H1), mRNA   |
| NM_003599 | Homo sapiens suppressor of Ty 3 homolog (S. cerevisiae) (SUPT3H), mRNA  |
| NM_003162 | Homo sapiens striatin, calmodulin binding protein (STRN), mRNA  |
| NM_003134 | Homo sapiens signal recognition particle 14kD (homologous Alu RNA binding protein) (SRP14), mRNA                            |
| NM_003088 | Homo sapiens singed-like (fascin homolog, sea urchin) (Drosophila) (SNL), mRNA  |
| NM_003061 | Homo sapiens slit homolog 1 (Drosophila) (SLIT1), mRNA  |
| NM_003036 | Homo sapiens v-ski sarcoma viral oncogene homolog (avian) (SKI), mRNA   |
| NM_003031 | Homo sapiens seven in absentia homolog 1 (Drosophila) (SLAH1), mRNA   |
| NM_000193 | Homo sapiens sonic hedgehog homolog (Drosophila) (SHH), mRNA  |

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| NM_003003 | Homo sapiens SEC14-like 1 ( <i>S. cerevisiae</i> ) (SEC14L1), mRNA   |
| NM_002983 | Homo sapiens small inducible cytokine A3 (SCYA3), mRNA   |
| NM_002982 | Homo sapiens small inducible cytokine A2 (monocyte chemotactic protein 1) (SCYA2), mRNA                                  |
| NM_002981 | Homo sapiens small inducible cytokine A1, 1-309 (SCYA1), mRNA  |
| NM_003864 | Homo sapiens sin3-associated polypeptide, 30kD (SAP30), mRNA   |
| NM_002962 | Homo sapiens S100 calcium binding protein A5 (S100A5), mRNA  |
| NM_002960 | Homo sapiens S100 calcium binding protein A3 (S100A3), mRNA  |
| NM_002966 | Homo sapiens S100 calcium binding protein A10 (annexin II ligand, calpactin I, light polypeptide (p11)) (S100A10), mRNA  |
| NM_003707 | Homo sapiens RuvB-like 1 ( <i>E. coli</i> ) (RUVBL1), mRNA   |
| NM_002944 | Homo sapiens v-ros UR2 sarcoma virus oncogene homolog 1 (avian) (ROS1), mRNA   |
| NM_002941 | Homo sapiens roundabout, axon guidance receptor, homolog 1 ( <i>Drosophila</i> ) (ROBO1), mRNA                           |
| NM_000326 | Homo sapiens retinaldehyde binding protein 1 (RLBP1), mRNA   |
| NM_002930 | Homo sapiens Ric-like, expressed in neurons ( <i>Drosophila</i> ) (RIN), mRNA  |
| NM_003961 | Homo sapiens rhomboid, veinlet-like 1 ( <i>Drosophila</i> ) (RHBDL), mRNA  |
| NM_002912 | Homo sapiens REV3-like, catalytic subunit of DNA polymerase zeta (yeast) (REV3L), mRNA                                   |
| NM_002900 | Homo sapiens retinol binding protein 3, interstitial (RBP3), mRNA  |
| NM_002894 | Homo sapiens retinoblastoma binding protein 8 (RBBP8), mRNA  |
| NM_002888 | Homo sapiens retinoic acid receptor responder (tazarotene induced) 1 (RARRES1), mRNA                                     |
| NM_002879 | Homo sapiens RAD52 homolog ( <i>S. cerevisiae</i> ) (RAD52), mRNA  |
| NM_002878 | Homo sapiens RAD51-like 3 ( <i>S. cerevisiae</i> ) (RAD51L3), mRNA   |
| NM_002875 | Homo sapiens RAD51 homolog (RecA homolog, <i>E. coli</i> ) ( <i>S. cerevisiae</i> ) (RAD51), mRNA                        |
| NM_002874 | Homo sapiens RAD23 homolog B ( <i>S. cerevisiae</i> ) (RAD23B), mRNA   |
| NM_002853 | Homo sapiens RAD1 homolog ( <i>S. pombe</i> ) (RAD1), mRNA   |
| NM_002873 | Homo sapiens RAD17 homolog ( <i>S. pombe</i> ) (RAD17), mRNA   |
| NM_000264 | Homo sapiens patched homolog ( <i>Drosophila</i> ) (PTCH), mRNA  |
| NM_003738 | Homo sapiens patched homolog 2 ( <i>Drosophila</i> ) (PTCH2), mRNA   |
| NM_002616 | Homo sapiens period homolog 1 ( <i>Drosophila</i> ) (PER1), mRNA   |
| NM_002600 | Homo sapiens phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 duncce homolog, <i>Drosophila</i> ) (PDE4B), mRNA |
| NM_002568 | Homo sapiens poly(A) binding protein, cytoplasmic 1 (PABPC1), mRNA   |
| NM_003932 | Homo sapiens suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein) (ST13), mRNA                 |
| NM_003715 | Homo sapiens vesicle docking protein p115 (P115), mRNA   |
| NM_002553 | Homo sapiens origin recognition complex, subunit 5-like (yeast) (ORC5L), mRNA  |
| NM_002552 | Homo sapiens origin recognition complex, subunit 4-like (yeast) (ORC4L), mRNA  |
| NM_003634 | Homo sapiens nipsnap homolog 1 ( <i>C. elegans</i> ) (NIPSNAP1), mRNA  |
| NM_002499 | Homo sapiens neogenin homolog 1 (chicken) (NEO1), mRNA   |
| NM_002484 | Homo sapiens nucleotide binding protein 1 (MinD homolog, <i>E. coli</i> ) (NUBP1), mRNA                                  |
| NM_003827 | Homo sapiens N-ethylmaleimide-sensitive factor attachment protein, alpha (NAPA), mRNA                                    |
| NM_002466 | Homo sapiens v-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2), mRNA                                    |

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| NM_002448 | Homo sapiens msh homeo box homolog 1 (Drosophila) (MSX1), mRNA   |
| NM_003576 | Homo sapiens serine/threonine kinase 24 (STE20 homolog, yeast) (STK24), mRNA   |
| NM_002442 | Homo sapiens musashi homolog 1 (Drosophila) (MSI1), mRNA   |
| NM_002441 | Homo sapiens mutS homolog 5 (E. coli) (MSH5), mRNA   |
| NM_002440 | Homo sapiens mutS homolog 4 (E. coli) (MSH4), mRNA   |
| NM_002439 | Homo sapiens mutS homolog 3 (E. coli) (MSH3), mRNA   |
| NM_002405 | Homo sapiens manic fringe homolog (Drosophila) (MFNG), mRNA  |
| NM_002402 | Homo sapiens mesoderm specific transcript homolog (mouse) (MEST), mRNA   |
| NM_002398 | Homo sapiens Meis1, myeloid ecotropic viral integration site 1 homolog (mouse) (MEIS1), mRNA                               |
| NM_002393 | Homo sapiens Mdm4, transformed 3T3 cell double minute 4, p53 binding protein (mouse) (MDM4), mRNA                          |
| NM_002392 | Homo sapiens Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) (MDM2), transcript variant MDM2, mRNA |
| NM_003906 | Homo sapiens MCM3 minichromosome maintenance deficient 3 (S. cerevisiae) associated protein (MCM3AP), mRNA                 |
| NM_002360 | Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog K (avian) (MAFK), mRNA                                 |
| NM_002359 | Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog G (avian) (MAFG), mRNA                                 |
| NM_003550 | Homo sapiens MAD1 mitotic arrest deficient-like 1 (yeast) (MAD1L1), mRNA   |
| NM_003937 | Homo sapiens kynureninase (L-kynurenine hydrolase) (KYNU), mRNA  |
| NM_002269 | Homo sapiens karyopherin alpha 5 (importin alpha 6) (KPNA5), mRNA  |
| NM_003772 | Homo sapiens jerky homolog-like (mouse) (JRKL), mRNA   |
| NM_002202 | Homo sapiens ISL1 transcription factor, LIM/homeodomain, (islet-1) (ISL1), mRNA  |
| NM_003604 | Homo sapiens insulin receptor substrate 4 (IRS4), mRNA   |
| NM_001570 | Homo sapiens interleukin-1 receptor-associated kinase 2 (IRAK2), mRNA  |
| NM_003866 | Homo sapiens inositol polyphosphate-4-phosphatase, type II, 105kD (INPP4B), mRNA   |
| NM_001536 | Homo sapiens HMT1 hnRNP methyltransferase-like 2 (S. cerevisiae) (HRMT1L2), mRNA   |
| NM_001535 | Homo sapiens HMT1 hnRNP methyltransferase-like 1 (S. cerevisiae) (HRMT1L1), mRNA   |
| NM_003806 | Homo sapiens harakiri, BCL2 interacting protein (contains only BH3 domain) (HRK), mRNA                                     |
| NM_002152 | Homo sapiens histidine rich calcium binding protein (HRC), mRNA  |
| NM_002114 | Homo sapiens human immunodeficiency virus type I enhancer binding protein 1 (HIVEP1), mRNA                                 |
| NM_003710 | Homo sapiens serine protease inhibitor, Kunitz type 1 (SPINT1), mRNA   |
| NM_000179 | Homo sapiens mutS homolog 6 (E. coli) (MSH6), mRNA   |
| NM_000839 | Homo sapiens glutamate receptor, metabotropic 2 (GRM2), mRNA   |
| NM_002077 | Homo sapiens golgi autoantigen, golgin subfamily a, 1 (GOLGA1), mRNA   |
| NM_003878 | Homo sapiens gamma-glutamyl hydrolase (conjugase, folylpolyglutamyl hydrolase) (GGH), mRNA                                 |
| NM_001488 | Homo sapiens transcriptional adaptor 2 (ADA2 homolog, yeast)-like (TADA2L), mRNA   |
| NM_001487 | Homo sapiens GCN5 general control of amino-acid synthesis 5-like 1 (yeast) (GCN5L1), mRNA                                  |
| NM_003643 | Homo sapiens glial cells missing homolog a (Drosophila) (GCMA), mRNA   |
| NM_002052 | Homo sapiens GATA binding protein 4 (GATA4), mRNA  |

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| NM_002051 | Homo sapiens GATA binding protein 3 (GATA3), mRNA   |
| NM_002050 | Homo sapiens GATA binding protein 2 (GATA2), mRNA   |
| NM_002049 | Homo sapiens GATA binding protein 1 (globin transcription factor 1) (GATA1), mRNA                 |
| NM_002040 | Homo sapiens GA binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA          |
| NM_002039 | Homo sapiens GRB2-associated binding protein 1 (GAB1), mRNA                                       |
| NM_003508 | Homo sapiens frizzled homolog 9 (Drosophila) (FZD9), mRNA   |
| NM_003507 | Homo sapiens frizzled homolog 7 (Drosophila) (FZD7), mRNA   |
| NM_003506 | Homo sapiens frizzled homolog 6 (Drosophila) (FZD6), mRNA   |
| NM_003468 | Homo sapiens frizzled homolog 5 (Drosophila) (FZD5), mRNA   |
| NM_003505 | Homo sapiens frizzled homolog 1 (Drosophila) (FZD1), mRNA   |
| NM_001465 | Homo sapiens FYN binding protein (FYB-120/130) (FYB), mRNA  |
| NM_002031 | Homo sapiens fyn-related kinase (FRK), mRNA   |
| NM_003717 | Homo sapiens neuropeptide FF-amide peptide precursor (NPFF), mRNA                                 |
| NM_001457 | Homo sapiens filamin B, beta (actin binding protein 278) (FLNB), mRNA                             |
| NM_001456 | Homo sapiens filamin A, alpha (actin binding protein 280) (FLNA), mRNA                            |
| NM_002018 | Homo sapiens flightless I homolog (Drosophila) (FLII), mRNA                                       |
| NM_001991 | Homo sapiens enhancer of zeste homolog 1 (Drosophila) (EZH1), mRNA                                |
| NM_001990 | Homo sapiens eyes absent homolog 3 (Drosophila) (EYA3), mRNA                                      |
| NM_000503 | Homo sapiens eyes absent homolog 1 (Drosophila) (EYA1), mRNA                                      |
| NM_001989 | Homo sapiens eve, even-skipped homeo box homolog 1 (Drosophila) (EVX1), mRNA                      |
| NM_001982 | Homo sapiens v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) (ERBB3), mRNA      |
| NM_003584 | Homo sapiens dual specificity phosphatase 11 (RNA/RNP complex 1-interacting) (DUSP11), mRNA       |
| NM_003859 | Homo sapiens dolichyl-phosphate mannosyltransferase polypeptide 1, catalytic subunit (DPM1), mRNA |
| NM_001928 | Homo sapiens D component of complement (adipsin) (DF), mRNA                                       |
| NM_003649 | Homo sapiens D-aspartate oxidase (DDO), transcript variant 1, mRNA                                |
| NM_001343 | Homo sapiens disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila) (DAB2), mRNA      |
| NM_001913 | Homo sapiens cut-like 1, CCAAT displacement protein (Drosophila) (CUTL1), mRNA                    |
| NM_001316 | Homo sapiens CSE1 chromosome segregation 1-like (yeast) (CSE1L), mRNA                             |
| NM_003652 | Homo sapiens carboxypeptidase Z (CPZ), mRNA   |
| NM_003909 | Homo sapiens copine III (CPNE3), mRNA   |
| NM_003915 | Homo sapiens copine I (CPNE1), mRNA   |
| NM_001308 | Homo sapiens carboxypeptidase N, polypeptide 1, 50kD (CPN1), mRNA                                 |
| NM_001841 | Homo sapiens cannabinoid receptor 2 (macrophage) (CNR2), mRNA                                     |
| NM_001280 | Homo sapiens cold inducible RNA binding protein (CIRBP), mRNA                                     |
| NM_001274 | Homo sapiens CHK1 checkpoint homolog (S. pombe) (CHEK1), mRNA                                     |
| NM_001806 | Homo sapiens CCAAT/enhancer binding protein (C/EBP), gamma (CEBPG), mRNA                          |
| NM_003655 | Homo sapiens chromobox homolog 4 (Pc class homolog, Drosophila) (CBX4), mRNA                      |
| NM_001749 | Homo sapiens calpain, small subunit 1 (CAPNS1), mRNA  |
| NM_000716 | Homo sapiens complement component 4 binding protein, beta (C4BPB), mRNA                           |
| NM_000715 | Homo sapiens complement component 4 binding protein, alpha (C4BPA), mRNA                          |
| NM_001726 | Homo sapiens bromodomain, testis-specific (BRDT), mRNA  |

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| NM_001205 | Homo sapiens BCL2/adenovirus E1B 19kD interacting protein 1 (BNIP1), transcript variant BNIP1, mRNA                     |
| NM_001714 | Homo sapiens Bicaudal D homolog 1 (Drosophila) (BICD1), mRNA  |
| NM_003766 | Homo sapiens beclin 1 (coiled-coil, myosin-like BCL2 interacting protein) (BECN1), mRNA                                 |
| NM_003567 | Homo sapiens breast cancer anti-estrogen resistance 3 (BCAR3), mRNA   |
| NM_001189 | Homo sapiens bagpipe homeobox homolog 1 (Drosophila) (BAPX1), mRNA  |
| NM_001698 | Homo sapiens AU RNA binding protein/enoyl-Coenzyme A hydratase (AUH), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001672 | Homo sapiens agouti signaling protein, nonagouti homolog (mouse) (ASIP), mRNA   |
| NM_001638 | Homo sapiens apolipoprotein F (APOF), mRNA  |
| NM_003977 | Homo sapiens aryl hydrocarbon receptor interacting protein (AIP), mRNA  |
| NM_001138 | Homo sapiens agouti related protein homolog (mouse) (AGRP), transcript variant 1, mRNA                                  |
| NM_058246 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 6 (DNAJB6), mRNA   |
| NM_025225 | Homo sapiens hypothetical protein DJ796I17.1 (DJ796I17.1), mRNA   |
| NM_058165 | Homo sapiens diacylglycerol acyltransferase 2-like (DGAT2-like), mRNA   |
| NM_001861 | Homo sapiens cytochrome c oxidase subunit IV isoform 1 (COX4I1), nuclear gene encoding mitochondrial protein, mRNA      |
| NM_014491 | Homo sapiens forkhead box P2 (FOXP2), mRNA  |
| NM_054110 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglactosaminyltransferase 7 (GALNT7), mRNA           |
| NM_006726 | Homo sapiens vesicle trafficking, beach and anchor containing (LRBA), mRNA  |
| NM_020663 | Homo sapiens TC10-like Rho GTPase (TCL), mRNA   |
| NM_020919 | Homo sapiens amyotrophic lateral sclerosis 2 (juvenile) (ALS2), mRNA  |
| NM_052852 | Homo sapiens hypothetical zinc finger protein MGC2396 (MGC2396), mRNA   |
| NM_053043 | Homo sapiens hypothetical protein MGC20460 (MGC20460), mRNA   |
| NM_053017 | Homo sapiens ADP-ribosyltransferase 5 (ART5), mRNA  |
| NM_052999 | Homo sapiens chemokine-like factor-like protein CKLFH1 (CKLFH1), mRNA   |
| NM_052881 | Homo sapiens hypothetical protein DJ734P14.5 (novel C2H2 type zinc finger protein) (MGC20504), mRNA                     |
| NM_052968 | Homo sapiens apolipoprotein A-V (APOA5), mRNA   |
| NM_052960 | Homo sapiens retinoid binding protein 7 (RBP7), mRNA  |
| NM_052959 | Homo sapiens pannexin 3 (PANX3), mRNA   |
| NM_052948 | Homo sapiens sorting nexin 26 (SNX26), mRNA   |
| NM_052947 | Homo sapiens heart alpha-kinase (HAK), mRNA   |
| NM_052946 | Homo sapiens hypothetical protein MGC20702 (MGC20702), mRNA   |
| NM_052943 | Homo sapiens hypothetical protein MGC16491 (MGC16491), mRNA   |
| NM_052941 | Homo sapiens guanylate binding protein 4 (GBP4), mRNA   |
| NM_052935 | Homo sapiens hypothetical protein MGC20781 (MGC20781), mRNA   |
| NM_052890 | Homo sapiens peptidoglycan recognition protein L precursor (PGLYRP), mRNA   |
| NM_052885 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 13 (SLC2A13), mRNA                       |
| NM_052884 | Homo sapiens sialic acid binding Ig-like lectin 11 (SIGLEC11), mRNA   |
| NM_052877 | Homo sapiens similar to hypothetical protein MNCb-2386 (MGC17544), mRNA   |
| NM_052876 | Homo sapiens transcriptional repressor NAC1 (NAC1), mRNA  |
| NM_052873 | Homo sapiens MGC16028 similar to RIKEN cDNA 1700019E19 gene (MGC16028), mRNA  |
| NM_052871 | Homo sapiens hypothetical protein MGC4677 (MGC4677), mRNA   |
| NM_052870 | Homo sapiens sorting nexin 18 (SNX18), mRNA   |

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| NM_052859 | Homo sapiens putative endoplasmic reticulum multispan transmembrane protein (RFT1), mRNA  |
| NM_052858 | Homo sapiens similar to RIKEN cDNA 1810006A16 gene (LOC91862), mRNA   |
| NM_052855 | Homo sapiens hypothetical protein MGC15396 (MGC15396), mRNA   |
| NM_052854 | Homo sapiens old astrocyte specifically induced substance (OASIS), mRNA   |
| NM_052844 | Homo sapiens hypothetical protein MGC20486 (MGC20486), mRNA   |
| NM_052839 | Homo sapiens pannexin 2 (PANX2), mRNA   |
| NM_033551 | Homo sapiens hypothetical protein MGC19556 (MGC19556), mRNA   |
| NM_033549 | Homo sapiens hypothetical gene MGC1127 (MGC1127), mRNA  |
| NM_033546 | Homo sapiens myosin regulatory light chain (MLC-B), mRNA  |
| NM_033544 | Homo sapiens similar to cyclin-E binding protein 1 (H. sapiens) (MGC14386), mRNA  |
| NM_033515 | Homo sapiens MacGAP protein (MacGAP), mRNA  |
| NM_033519 | Homo sapiens olfactory receptor sdolf (sdolf), mRNA   |
| NM_033516 | Homo sapiens protein kinase NYD-SP25 (NYD-SP25), mRNA   |
| NM_032231 | Homo sapiens hypothetical protein FLJ22875 (FLJ22875), mRNA   |
| NM_018437 | Homo sapiens hypothetical protein EDAG-1 (EDAG-1), mRNA   |
| NM_033378 | Homo sapiens chorionic gonadotropin, beta polypeptide 2 (CGB2), mRNA  |
| NM_033377 | Homo sapiens chorionic gonadotropin, beta polypeptide 1 (CGB1), mRNA  |
| NM_033448 | Homo sapiens keratin 6 irs (KRT6IRS), mRNA  |
| NM_033424 | Homo sapiens similar to MYOSIN HEAVY CHAIN, CARDIAC MUSCLE ALPHA ISOFORM (MYHC-ALPHA) (M. musculus) (LOC92771), mRNA            |
| NM_033445 | Homo sapiens similar to H2A histone family, member A (H. sapiens) (MGC3165), mRNA   |
| NM_033439 | Homo sapiens DVS27-related protein (DVS27), mRNA  |
| NM_033440 | Homo sapiens elastase 2A (ELA2A), mRNA  |
| NM_033438 | Homo sapiens CD84-H1 precursor (CD84-H1), mRNA  |
| NM_033423 | Homo sapiens similar to granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1) (H. sapiens) (CTLA1), mRNA |
| NM_033411 | Homo sapiens hypothetical protein MGC13523 (MGC13523), mRNA   |
| NM_033416 | Homo sapiens similar to HYPOTHETICAL 34.0 KDA PROTEIN ZK795.3 IN CHROMOSOME IV (MGC19606), mRNA                                 |
| NM_033413 | Homo sapiens hypothetical gene MGC16309 (MGC16309), mRNA  |
| NM_033410 | Homo sapiens hypothetical protein MGC13138 (MGC13138), mRNA   |
| NM_033419 | Homo sapiens hypothetical gene MGC9753 (MGC9753), mRNA  |
| NM_014083 | Homo sapiens PRO0767 protein (PRO0767), mRNA  |
| NM_033043 | Homo sapiens chorionic gonadotropin, beta polypeptide 5 (CGB5), mRNA  |
| NM_031451 | Homo sapiens hypothetical protein MGC4766 similar to testis specific protein TES101RP (MGC4766), mRNA                           |
| NM_033183 | Homo sapiens chorionic gonadotropin, beta polypeptide 8 (CGB8), mRNA  |
| NM_020443 | Homo sapiens hypothetical protein MGC14961 (MGC14961), mRNA   |
| NM_033343 | Homo sapiens LIM homeobox protein 4 (LHX4), mRNA  |
| NM_033318 | Homo sapiens hypothetical gene supported by AL449243 (LOC91689), mRNA   |
| NM_033328 | Homo sapiens capping protein alpha 3 (CAPPA3), mRNA   |
| NM_033315 | Homo sapiens ras-like protein VTS58635 (VTS58635), mRNA   |
| NM_033309 | Homo sapiens hypothetical protein MGC4655 (MGC4655), mRNA   |
| NM_033296 | Homo sapiens T-cell activation protein (PGR1), mRNA   |
| NM_033297 | Homo sapiens leucine-rich-repeat protein (RNO2), mRNA   |
| NM_033280 | Homo sapiens similar to signal peptidase complex (18kD) (LOC90701), mRNA  |
| NM_033196 | Homo sapiens similar to ZINC FINGER PROTEIN 85 (ZINC FINGER PROTEIN HPF4) (HTF1) (H. sapiens) (LOC91120), mRNA                  |
| NM_033272 | Homo sapiens potassium channel subunit HERG-3 (HERG-3), mRNA  |

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| NM_033261 | Homo sapiens diphosphate dimethylallyl diphosphate isomerase 2 (IDI2), mRNA             |
| NM_033254 | Homo sapiens brother of CDO (BOC), mRNA   |
| NM_033204 | Homo sapiens hypothetical gene DKFZp570I0164 (DKFZp570I0164), mRNA                      |
| NM_033259 | Homo sapiens CaM-KII inhibitory protein (CAM-KIIN), mRNA                                |
| NM_032597 | Homo sapiens testes development-related NYD-SP21 (NYD-SP21), mRNA                       |
| NM_033212 | Homo sapiens hypothetical gene supported by BC004307; BC008285 (MGC10992), mRNA         |
| NM_033208 | Homo sapiens similar to jerky (mouse) homolog-like (LOC91151), mRNA                     |
| NM_033195 | Homo sapiens lactate dehydrogenase A -like (LDHL), mRNA                                 |
| NM_015643 | Homo sapiens DKFZP434F122 protein (DKFZP434F122), mRNA                                  |
| NM_032604 | Homo sapiens lung alpha/beta hydrolase 1 (LABH1), mRNA                                  |
| NM_032133 | Homo sapiens hypothetical protein DKFZp434N1415 (DKFZP434N1415), mRNA                   |
| NM_030803 | Homo sapiens hypothetical protein FLJ10035 (FLJ10035), mRNA                             |
| NM_024062 | Homo sapiens hypothetical protein MGC5338 (MGC5338), mRNA                               |
| NM_024059 | Homo sapiens hypothetical protein MGC5356 (MGC5356), mRNA                               |
| NM_016542 | Homo sapiens serine/threonine protein kinase MASK (MST4), mRNA                          |
| NM_033127 | Homo sapiens regucalcin gene promotor region related protein (RGPR), mRNA               |
| NM_033128 | Homo sapiens scinderin (SCIN), mRNA   |
| NM_033058 | Homo sapiens ring finger protein 29 (RNF29), mRNA                                       |
| NM_033116 | Homo sapiens hypothetical protein MGC16714 (MGC16714), mRNA                             |
| NM_033123 | Homo sapiens testis-development related NYD-SP27 (NYD-SP27), mRNA                       |
| NM_033126 | Homo sapiens serine/threonine kinase PSKH2 (PSKH2), mRNA                                |
| NM_033124 | Homo sapiens NYD-SP28 protein (NYD-SP28), mRNA  |
| NM_033122 | Homo sapiens testis development protein NYD-SP26 (NYD-SP26), mRNA                       |
| NM_033114 | Homo sapiens MADP-1 protein (MADP-1), mRNA  |
| NM_033083 | Homo sapiens EAF1 protein (EAF1), mRNA  |
| NM_033087 | Homo sapiens hypothetical protein FLJ14511 (FLJ14511), mRNA                             |
| NM_024512 | Homo sapiens leucine-rich repeat-containing 2 (LRRC2), mRNA                             |
| NM_006029 | Homo sapiens paraneoplastic antigen MA1 (PNMA1), mRNA                                   |
| NM_033025 | Homo sapiens hypothetical protein FLJ13511 (7h3), mRNA                                  |
| NM_015169 | Homo sapiens homolog of yeast ribosome biogenesis regulatory protein RRS1 (RRS1), mRNA  |
| NM_015129 | Homo sapiens septin 6 (SEP2), mRNA  |
| NM_032838 | Homo sapiens hypothetical protein FLJ14779 (FLJ14779), mRNA                             |
| NM_032206 | Homo sapiens hypothetical protein FLJ21709 (FLJ21709), mRNA                             |
| NM_032797 | Homo sapiens hypothetical protein FLJ14497 (FLJ14497), mRNA                             |
| NM_032472 | Homo sapiens peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3), mRNA                |
| NM_032936 | Homo sapiens DC32 (DC32), mRNA  |
| NM_032577 | Homo sapiens melanoma-associated chondroitin sulfate proteoglycan-like (LOC84664), mRNA |
| NM_032933 | Homo sapiens hypothetical protein MGC11386 (MGC11386), mRNA                             |
| NM_032929 | Homo sapiens hypothetical protein MGC14793 (MGC14793), mRNA                             |
| NM_032928 | Homo sapiens hypothetical protein MGC14141 (MGC14141), mRNA                             |
| NM_032927 | Homo sapiens hypothetical protein MGC13159 (MGC13159), mRNA                             |
| NM_032926 | Homo sapiens hypothetical protein MGC15737 (MGC15737), mRNA                             |
| NM_032921 | Homo sapiens hypothetical protein MGC15875 (MGC15875), mRNA                             |
| NM_032909 | Homo sapiens hypothetical protein MGC14139 (MGC14139), mRNA                             |
| NM_032908 | Homo sapiens hypothetical protein MGC14407 (MGC14407), mRNA                             |
| NM_032906 | Homo sapiens hypothetical protein MGC14156 (MGC14156), mRNA                             |
| NM_032905 | Homo sapiens hypothetical protein MGC14439 (MGC14439), mRNA                             |
| NM_032903 | Homo sapiens hypothetical protein MGC14425 (MGC14425), mRNA                             |

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| NM_032902 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 16A (PPP1R16A), mRNA |
| NM_032901 | Homo sapiens hypothetical protein MGC14288 (MGC14288), mRNA                             |
| NM_032899 | Homo sapiens hypothetical protein MGC14128 (MGC14128), mRNA                             |
| NM_032898 | Homo sapiens hypothetical protein MGC14126 (MGC14126), mRNA                             |
| NM_032897 | Homo sapiens hypothetical protein MGC14436 (MGC14436), mRNA                             |
| NM_032896 | Homo sapiens hypothetical protein MGC14388 (MGC14388), mRNA                             |
| NM_032892 | Homo sapiens hypothetical protein MGC14161 (MGC14161), mRNA                             |
| NM_032891 | Homo sapiens hypothetical protein MGC12928 (MGC12928), mRNA                             |
| NM_032890 | Homo sapiens hypothetical protein MGC13130 (MGC13130), mRNA                             |
| NM_032887 | Homo sapiens hypothetical protein MGC16037 (MGC16037), mRNA                             |
| NM_032885 | Homo sapiens hypothetical protein MGC15906 (MGC15906), mRNA                             |
| NM_032882 | Homo sapiens hypothetical protein MGC15827 (MGC15827), mRNA                             |
| NM_032881 | Homo sapiens U7 snRNP-specific Sm-like protein LSM10 (LSM10), mRNA                      |
| NM_032880 | Homo sapiens hypothetical protein MGC15730 (MGC15730), mRNA                             |
| NM_032878 | Homo sapiens hypothetical protein MGC15677 (MGC15677), mRNA                             |
| NM_032873 | Homo sapiens hypothetical protein MGC15437 (MGC15437), mRNA                             |
| NM_032867 | Homo sapiens hypothetical protein FLJ14966 (FLJ14966), mRNA                             |
| NM_032865 | Homo sapiens hypothetical protein FLJ14950 (FLJ14950), mRNA                             |
| NM_032861 | Homo sapiens hypothetical protein FLJ14917 (FLJ14917), mRNA                             |
| NM_032859 | Homo sapiens hypothetical protein FLJ14906 (FLJ14906), mRNA                             |
| NM_032856 | Homo sapiens hypothetical protein FLJ14888 (FLJ14888), mRNA                             |
| NM_032855 | Homo sapiens hematopoietic SH2 protein (HSH2), mRNA                                     |
| NM_032854 | Homo sapiens hypothetical protein FLJ14871 (FLJ14871), mRNA                             |
| NM_032850 | Homo sapiens hypothetical protein FLJ14840 (FLJ14840), mRNA                             |
| NM_032849 | Homo sapiens hypothetical protein FLJ14834 (FLJ14834), mRNA                             |
| NM_032847 | Homo sapiens hypothetical protein FLJ14825 (FLJ14825), mRNA                             |
| NM_032846 | Homo sapiens hypothetical protein FLJ14824 (FLJ14824), mRNA                             |
| NM_032844 | Homo sapiens hypothetical protein FLJ14813 (FLJ14813), mRNA                             |
| NM_032843 | Homo sapiens hypothetical protein FLJ14810 (FLJ14810), mRNA                             |
| NM_032842 | Homo sapiens hypothetical protein FLJ14803 (FLJ14803), mRNA                             |
| NM_032840 | Homo sapiens hypothetical protein FLJ14800 (FLJ14800), mRNA                             |
| NM_032839 | Homo sapiens hypothetical protein FLJ14784 (FLJ14784), mRNA                             |
| NM_032837 | Homo sapiens hypothetical protein FLJ14775 (FLJ14775), mRNA                             |
| NM_032836 | Homo sapiens hypothetical protein FLJ14768 (FLJ14768), mRNA                             |
| NM_032834 | Homo sapiens hypothetical protein FLJ14751 (FLJ14751), mRNA                             |
| NM_032833 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 15B (PPP1R15B), mRNA |
| NM_032832 | Homo sapiens hypothetical protein FLJ14735 (FLJ14735), mRNA                             |
| NM_032831 | Homo sapiens CAP-binding protein complex interacting protein 2 (CBCIP2), mRNA           |
| NM_032830 | Homo sapiens hypothetical protein FLJ14728 (FLJ14728), mRNA                             |
| NM_032829 | Homo sapiens hypothetical protein FLJ14721 (FLJ14721), mRNA                             |
| NM_032828 | Homo sapiens ubiquitin UBF-fl (UBF-fl), mRNA  |
| NM_032827 | Homo sapiens hypothetical protein FLJ14708 (FLJ14708), mRNA                             |
| NM_032826 | Homo sapiens hypothetical protein FLJ14697 (FLJ14697), mRNA                             |
| NM_032825 | Homo sapiens hypothetical protein FLJ14686 (FLJ14686), mRNA                             |
| NM_032821 | Homo sapiens hypothetical protein FLJ14665 (FLJ14665), mRNA                             |
| NM_032817 | Homo sapiens hypothetical protein FLJ14641 (FLJ14641), mRNA                             |
| NM_032816 | Homo sapiens hypothetical protein FLJ14640 (FLJ14640), mRNA                             |
| NM_032814 | Homo sapiens hypothetical protein FLJ14627 (FLJ14627), mRNA                             |
| NM_032811 | Homo sapiens hypothetical protein FLJ14621 (FLJ14621), mRNA                             |



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| NM_032810 | Homo sapiens hypothetical protein FLJ14600 (FLJ14600), mRNA                       |
| NM_032809 | Homo sapiens hypothetical protein FLJ14596 (FLJ14596), mRNA                       |
| NM_032808 | Homo sapiens hypothetical protein FLJ14594 (FLJ14594), mRNA                       |
| NM_032807 | Homo sapiens hypothetical protein FLJ14590 (FLJ14590), mRNA                       |
| NM_032806 | Homo sapiens hypothetical protein FLJ14566 (FLJ14566), mRNA                       |
| NM_032805 | Homo sapiens hypothetical protein FLJ14549 (FLJ14549), mRNA                       |
| NM_032802 | Homo sapiens hypothetical protein FLJ14540 (FLJ14540), mRNA                       |
| NM_032799 | Homo sapiens hypothetical protein FLJ14524 (FLJ14524), mRNA                       |
| NM_032796 | Homo sapiens reserved (SYAP1), mRNA   |
| NM_032792 | Homo sapiens hypothetical protein FLJ14486 (FLJ14486), mRNA                       |
| NM_032790 | Homo sapiens hypothetical protein FLJ14466 (FLJ14466), mRNA                       |
| NM_032788 | Homo sapiens hypothetical protein FLJ14457 (FLJ14457), mRNA                       |
| NM_032787 | Homo sapiens hypothetical protein FLJ14454 (FLJ14454), mRNA                       |
| NM_032786 | Homo sapiens hypothetical protein FLJ14451 (FLJ14451), mRNA                       |
| NM_032785 | Homo sapiens hypothetical protein FLJ14442 (FLJ14442), mRNA                       |
| NM_032781 | Homo sapiens hypothetical protein FLJ14427 (FLJ14427), mRNA                       |
| NM_032780 | Homo sapiens hypothetical protein FLJ14399 (FLJ14399), mRNA                       |
| NM_032779 | Homo sapiens hypothetical protein FLJ14397 (FLJ14397), mRNA                       |
| NM_032778 | Homo sapiens hypothetical protein FLJ14393 (FLJ14393), mRNA                       |
| NM_032775 | Homo sapiens hypothetical protein FLJ14360 (FLJ14360), mRNA                       |
| NM_032773 | Homo sapiens hypothetical protein MGC4126 (MGC4126), mRNA                         |
| NM_032772 | Homo sapiens hypothetical protein MGC2555 (MGC2555), mRNA                         |
| NM_032771 | Homo sapiens hypothetical protein MGC12217 (MGC12217), mRNA                       |
| NM_032770 | Homo sapiens hypothetical protein MGC16291 (MGC16291), mRNA                       |
| NM_032765 | Homo sapiens hypothetical protein MGC16175 (MGC16175), mRNA                       |
| NM_032764 | Homo sapiens hypothetical protein MGC16153 (MGC16153), mRNA                       |
| NM_032762 | Homo sapiens hypothetical protein MGC16121 (MGC16121), mRNA                       |
| NM_032761 | Homo sapiens hypothetical protein MGC16075 (MGC16075), mRNA                       |
| NM_032759 | Homo sapiens hypothetical protein FLJ11328 (FLJ11328), mRNA                       |
| NM_032758 | Homo sapiens hypothetical protein MGC1346 (MGC1346), mRNA                         |
| NM_032757 | Homo sapiens hypothetical protein MGC15705 (MGC15705), mRNA                       |
| NM_032755 | Homo sapiens hypothetical protein MGC15634 (MGC15634), mRNA                       |
| NM_032751 | Homo sapiens hypothetical protein MGC15504 (MGC15504), mRNA                       |
| NM_032750 | Homo sapiens hypothetical protein MGC15429 (MGC15429), mRNA                       |
| NM_032747 | Homo sapiens hypothetical protein MGC14697 (MGC14697), mRNA                       |
| NM_032746 | Homo sapiens hypothetical protein MGC12538 (MGC12538), mRNA                       |
| NM_032740 | Homo sapiens hypothetical protein MGC5391 (MGC5391), mRNA                         |
| NM_032739 | Homo sapiens hypothetical protein MGC5370 (MGC5370), mRNA                         |
| NM_032735 | Homo sapiens hypothetical protein MGC13168 (MGC13168), mRNA                       |
| NM_032733 | Homo sapiens hypothetical protein MGC12679 (MGC12679), mRNA                       |
| NM_032732 | Homo sapiens hypothetical protein MGC10763 (MGC10763), mRNA                       |
| NM_032731 | Homo sapiens hypothetical protein MGC14353 (MGC14353), mRNA                       |
| NM_032730 | Homo sapiens NOGO-interacting mitochondrial protein (NIMP), mRNA                  |
| NM_032727 | Homo sapiens internexin neuronal intermediate filament protein, alpha (INA), mRNA |
| NM_032726 | Homo sapiens hypothetical protein MGC12837 (MGC12837), mRNA                       |
| NM_032725 | Homo sapiens hypothetical protein MGC13125 (MGC13125), mRNA                       |
| NM_032724 | Homo sapiens hypothetical protein MGC13269 (MGC13269), mRNA                       |
| NM_032722 | Homo sapiens hypothetical protein MGC13275 (MGC13275), mRNA                       |
| NM_032721 | Homo sapiens hypothetical protein MGC11314 (MGC11314), mRNA                       |
| NM_032718 | Homo sapiens hypothetical protein MGC11332 (MGC11332), mRNA                       |

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| NM_032717 | Homo sapiens hypothetical protein MGC11324 (MGC11324), mRNA                  |
| NM_032714 | Homo sapiens hypothetical protein MGC13251 (MGC13251), mRNA                  |
| NM_032710 | Homo sapiens hypothetical protein MGC13053 (MGC13053), mRNA                  |
| NM_032709 | Homo sapiens hypothetical protein MGC13047 (MGC13047), mRNA                  |
| NM_032701 | Homo sapiens hypothetical protein MGC2705 (MGC2705), mRNA                    |
| NM_032691 | Homo sapiens hypothetical protein MGC11082 (MGC11082), mRNA                  |
| NM_032690 | Homo sapiens hypothetical protein MGC13198 (MGC13198), mRNA                  |
| NM_032687 | Homo sapiens hypothetical protein MGC13010 (MGC13010), mRNA                  |
| NM_032683 | Homo sapiens hypothetical protein MGC12972 (MGC12972), mRNA                  |
| NM_032680 | Homo sapiens hypothetical protein MGC4266 (MGC4266), mRNA                    |
| NM_032679 | Homo sapiens hypothetical protein MGC4400 (MGC4400), mRNA                    |
| NM_032676 | Homo sapiens hypothetical protein MGC10955 (MGC10955), mRNA                  |
| NM_032673 | Homo sapiens hypothetical protein MGC10882 (MGC10882), mRNA                  |
| NM_032671 | Homo sapiens hypothetical protein MGC10814 (MGC10814), mRNA                  |
| NM_032664 | Homo sapiens hypothetical protein MGC11141 (MGC11141), mRNA                  |
| NM_032663 | Homo sapiens hypothetical protein MGC10702 (MGC10702), mRNA                  |
| NM_032658 | Homo sapiens hypothetical protein MGC10701 (MGC10701), mRNA                  |
| NM_032654 | Homo sapiens hypothetical protein MGC10981 (MGC10981), mRNA                  |
| NM_032653 | Homo sapiens hypothetical protein MGC10960 (MGC10960), mRNA                  |
| NM_032648 | Homo sapiens hypothetical protein MGC10820 (MGC10820), mRNA                  |
| NM_032647 | Homo sapiens hypothetical protein MGC10561 (MGC10561), mRNA                  |
| NM_032644 | Homo sapiens hypothetical protein MGC2452 (MGC2452), mRNA                    |
| NM_032641 | Homo sapiens hypothetical protein MGC2519 (MGC2519), mRNA                    |
| NM_032638 | Homo sapiens hypothetical protein MGC2306 (MGC2306), mRNA                    |
| NM_032633 | Homo sapiens hypothetical protein MGC5457 (MGC5457), mRNA                    |
| NM_032632 | Homo sapiens hypothetical protein MGC5378 (MGC5378), mRNA                    |
| NM_032630 | Homo sapiens HeLa cyclin-dependent kinase 2 interacting protein (CINP), mRNA |
| NM_032627 | Homo sapiens hypothetical protein MGC3181 (MGC3181), mRNA                    |
| NM_032626 | Homo sapiens hypothetical brain protein my038 (MY038), mRNA                  |
| NM_032624 | Homo sapiens hypothetical brain protein my050 (MY050), mRNA                  |
| NM_032623 | Homo sapiens ovary-specific acidic protein (OSAP), mRNA                      |
| NM_032622 | Homo sapiens multi-PDZ-domain-containing protein (LNX), mRNA                 |
| NM_032620 | Homo sapiens mitochondrial GTP binding protein (GTPBG3), mRNA                |
| NM_018622 | Homo sapiens presenilins associated rhomboid-like protein (PARL), mRNA       |
| NM_032498 | Homo sapiens homeobox protein from AL590526 (LOC84528), mRNA                 |
| NM_032600 | Homo sapiens testes development-related NYD-SP17 (NYD-SP17), mRNA            |
| NM_032599 | Homo sapiens testes development-related NYD-SP18 (NYD-SP18), mRNA            |
| NM_032594 | Homo sapiens insulinoma-associated protein IA-6 (INSM2), mRNA                |
| NM_032585 | Homo sapiens testis-specific transcript, Y-linked 6 (TTY6), mRNA             |
| NM_032575 | Homo sapiens Kruppel-like zinc finger protein GLIS2 (GLIS2), mRNA            |
| NM_032573 | Homo sapiens testis-specific protein TSP-NY (TSP-NY), mRNA                   |
| NM_032572 | Homo sapiens ribonuclease 7 (RNASE7), mRNA                                   |
| NM_032568 | Homo sapiens GABA(A) receptors associated protein like 3 (GABARAPL3), mRNA   |
| NM_032567 | Homo sapiens testis-specific protein NYD-TSP1 (NYD-TSP1), mRNA               |
| NM_032566 | Homo sapiens esophagus cancer-related gene-2 (ECG2), mRNA                    |
| NM_032562 | Homo sapiens group XIII secreted phospholipase A2 (PLA2G13), mRNA            |
| NM_032547 | Homo sapiens short coiled-coil protein (HRIHFB2072), mRNA                    |
| NM_032546 | Homo sapiens ring finger protein 30 (RNF30), mRNA                            |
| NM_032519 | Homo sapiens hypothetical protein HT023 (HT023), mRNA                        |
| NM_032513 | Homo sapiens hypothetical protein MGC11303 similar to Zinc transporter 2     |

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|           | (MGC11303), mRNA  |
| NM_032490 | Homo sapiens PNAS-127 protein (PNAS-127), mRNA  |
| NM_032488 | Homo sapiens protein related with psoriasis (LOC84518), mRNA  |
| NM_032471 | Homo sapiens protein kinase (cAMP-dependent, catalytic) inhibitor beta (PKIB), mRNA                         |
| NM_032292 | Homo sapiens hypothetical protein FLJ20203 (FLJ20203), mRNA   |
| NM_032263 | Homo sapiens hypothetical protein DKFZp434B227 (DKFZp434B227), mRNA   |
| NM_015178 | Homo sapiens KIAA0717 protein (KIAA0717), mRNA  |
| NM_032410 | Homo sapiens hook3 protein (HOOK3), mRNA  |
| NM_032108 | Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B (SEMA6B), mRNA |
| NM_015636 | Homo sapiens DKFZP586J0119 protein (DKFZP586J0119), mRNA  |
| NM_015701 | Homo sapiens hypothetical protein (CL25084), mRNA   |
| NM_015224 | Homo sapiens KIAA1105 protein (RAPI40), mRNA  |
| NM_032390 | Homo sapiens nucleolar protein interacting with the FHA domain of pKi-67 (NIFK), mRNA                       |
| NM_032388 | Homo sapiens nasopharyngeal carcinoma-related protein (NPCR), mRNA  |
| NM_032383 | Homo sapiens Hermansky-Pudlak syndrome 3 (HPS3), mRNA   |
| NM_032378 | Homo sapiens hypothetical protein FLJ20897 (FLJ20897), mRNA   |
| NM_032376 | Homo sapiens hypothetical protein MGC4251 (MGC4251), mRNA   |
| NM_032375 | Homo sapiens hypothetical protein MGC2865 (MGC2865), mRNA   |
| NM_032373 | Homo sapiens hypothetical protein MGC16202 (MGC16202), mRNA   |
| NM_032370 | Homo sapiens hypothetical protein MGC15716 (MGC15716), mRNA   |
| NM_032369 | Homo sapiens hypothetical protein MGC15619 (MGC15619), mRNA   |
| NM_032368 | Homo sapiens hypothetical protein MGC15436 (MGC15436), mRNA   |
| NM_032374 | Homo sapiens hypothetical protein MGC2562 (MGC2562), mRNA   |
| NM_032364 | Homo sapiens hypothetical protein MGC14726 (MGC14726), mRNA   |
| NM_032362 | Homo sapiens HEIL1 protein (HEIL1), mRNA  |
| NM_032361 | Homo sapiens hypothetical protein MGC5469 (MGC5469), mRNA   |
| NM_032360 | Homo sapiens hypothetical protein MGC2404 (MGC2404), mRNA   |
| NM_032359 | Homo sapiens hypothetical protein MGC4308 (MGC4308), mRNA   |
| NM_032358 | Homo sapiens hypothetical protein MGC13183 (MGC13183), mRNA   |
| NM_032357 | Homo sapiens hypothetical protein MGC12981 (MGC12981), mRNA   |
| NM_032356 | Homo sapiens hypothetical protein MGC14151 (MGC14151), mRNA   |
| NM_032355 | Homo sapiens hypothetical protein MGC13272 (MGC13272), mRNA   |
| NM_032352 | Homo sapiens hypothetical protein MGC11296 (MGC11296), mRNA   |
| NM_032350 | Homo sapiens hypothetical protein MGC11257 (MGC11257), mRNA   |
| NM_032349 | Homo sapiens hypothetical protein MGC11275 (MGC11275), mRNA   |
| NM_032348 | Homo sapiens hypothetical protein MGC3047 (MGC3047), mRNA   |
| NM_032346 | Homo sapiens hypothetical protein MGC13096 (MGC13096), mRNA   |
| NM_032345 | Homo sapiens hypothetical protein MGC13064 (MGC13064), mRNA   |
| NM_032343 | Homo sapiens hypothetical protein MGC13016 (MGC13016), mRNA   |
| NM_032341 | Homo sapiens hypothetical protein MGC14844 (MGC14844), mRNA   |
| NM_032339 | Homo sapiens hypothetical protein MGC14832 (MGC14832), mRNA   |
| NM_032336 | Homo sapiens hypothetical protein MGC14799 (MGC14799), mRNA   |
| NM_032334 | Homo sapiens hypothetical protein MGC14595 (MGC14595), mRNA   |
| NM_032332 | Homo sapiens hypothetical protein MGC4238 (MGC4238), mRNA   |
| NM_032331 | Homo sapiens hypothetical protein MGC2408 (MGC2408), mRNA   |
| NM_032328 | Homo sapiens hypothetical protein MGC12458 (MGC12458), mRNA   |
| NM_032322 | Homo sapiens hypothetical protein MGC13061 (MGC13061), mRNA   |
| NM_032321 | Homo sapiens hypothetical protein MGC13057 (MGC13057), mRNA   |
| NM_032319 | Homo sapiens chromosome 2 open reading frame 7 (C2orf7), mRNA   |

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| NM_032315 | Homo sapiens hypothetical protein MGC4399 (MGC4399), mRNA                      |
| NM_032314 | Homo sapiens hypothetical protein MGC4767 (MGC4767), mRNA                      |
| NM_032313 | Homo sapiens hypothetical protein MGC3232 (MGC3232), mRNA                      |
| NM_032312 | Homo sapiens hypothetical protein MGC11061 (MGC11061), mRNA                    |
| NM_032310 | Homo sapiens hypothetical protein MGC11115 (MGC11115), mRNA                    |
| NM_032307 | Homo sapiens hypothetical protein MGC10999 (MGC10999), mRNA                    |
| NM_032303 | Homo sapiens hypothetical protein MGC10940 (MGC10940), mRNA                    |
| NM_032302 | Homo sapiens hypothetical protein MGC10911 (MGC10911), mRNA                    |
| NM_032301 | Homo sapiens hypothetical protein MGC10870 (MGC10870), mRNA                    |
| NM_032300 | Homo sapiens hypothetical protein MGC10854 (MGC10854), mRNA                    |
| NM_032298 | Homo sapiens hypothetical protein DKFZp761O132 (DKFZp761O132), mRNA            |
| NM_032297 | Homo sapiens hypothetical protein DKFZp761D112 (DKFZp761D112), mRNA            |
| NM_032296 | Homo sapiens hypothetical protein DKFZp761A132 (DKFZp761A132), mRNA            |
| NM_032295 | Homo sapiens hypothetical protein DKFZp761N0624 (DKFZp761N0624), mRNA          |
| NM_032294 | Homo sapiens hypothetical protein DKFZp761M0423 (DKFZp761M0423), mRNA          |
| NM_032289 | Homo sapiens hypothetical protein DKFZp761B0514 (DKFZp761B0514), mRNA          |
| NM_032287 | Homo sapiens hypothetical protein DKFZp761O17121 (DKFZp761O17121), mRNA        |
| NM_032280 | Homo sapiens hypothetical protein DKFZp761J139 (DKFZp761J139), mRNA            |
| NM_032278 | Homo sapiens hypothetical protein DKFZp547P082 (DKFZp547P082), mRNA            |
| NM_032274 | Homo sapiens hypothetical protein DKFZp547F072 (DKFZp547F072), mRNA            |
| NM_032271 | Homo sapiens hypothetical protein DKFZp586I021 (DKFZp586I021), mRNA            |
| NM_032270 | Homo sapiens hypothetical protein DKFZp586J1119 (DKFZp586J1119), mRNA          |
| NM_032269 | Homo sapiens hypothetical protein DKFZp434I099 (DKFZp434I099), mRNA            |
| NM_032266 | Homo sapiens hypothetical protein DKFZp434G118 (DKFZp434G118), mRNA            |
| NM_032265 | Homo sapiens hypothetical protein DKFZp434N127 (DKFZp434N127), mRNA            |
| NM_032262 | Homo sapiens hypothetical protein DKFZp434N035 (DKFZp434N035), mRNA            |
| NM_032257 | Homo sapiens hypothetical protein DKFZp434N2435 (DKFZp434N2435), mRNA          |
| NM_032256 | Homo sapiens hypothetical protein DKFZp434K2435 (DKFZp434K2435), mRNA          |
| NM_032255 | Homo sapiens hypothetical protein DKFZp434I1930 (DKFZp434I1930), mRNA          |
| NM_032254 | Homo sapiens hypothetical protein DKFZp434F142 (DKFZp434F142), mRNA            |
| NM_032247 | Homo sapiens hypothetical protein DKFZp434E0519 (DKFZp434E0519), mRNA          |
| NM_032242 | Homo sapiens hypothetical protein DKFZp564A176 (DKFZp564A176), mRNA            |
| NM_032238 | Homo sapiens hypothetical protein FLJ23416 (FLJ23416), mRNA                    |
| NM_032235 | Homo sapiens hypothetical protein FLJ23138 (FLJ23138), mRNA                    |
| NM_032234 | Homo sapiens hypothetical protein FLJ23059 (FLJ23059), mRNA                    |
| NM_032233 | Homo sapiens hypothetical protein FLJ23027 (FLJ23027), mRNA                    |
| NM_032229 | Homo sapiens hypothetical protein FLJ22774 (FLJ22774), mRNA                    |
| NM_032221 | Homo sapiens hypothetical protein FLJ22369 (FLJ22369), mRNA                    |
| NM_032213 | Homo sapiens hypothetical protein FLJ21977 (FLJ21977), mRNA                    |
| NM_032212 | Homo sapiens similar to DNA-directed RNA polymerase I (135 kDa) (Rpo1-2), mRNA |
| NM_032207 | Homo sapiens hypothetical protein FLJ21742 (FLJ21742), mRNA                    |
| NM_032205 | Homo sapiens hypothetical protein FLJ21615 (FLJ21615), mRNA                    |
| NM_032196 | Homo sapiens hypothetical protein KIAA1259 (KIAA1259), mRNA                    |
| NM_032192 | Homo sapiens hypothetical protein FLJ20940 (FLJ20940), mRNA                    |

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| NM_032191 | Homo sapiens hypothetical protein FLJ14326 (FLJ14326), mRNA  |
| NM_032187 | Homo sapiens hypothetical protein FLJ14026 (FLJ14026), mRNA  |
| NM_032186 | Homo sapiens hypothetical protein FLJ13964 (FLJ13964), mRNA  |
| NM_032181 | Homo sapiens hypothetical protein FLJ13391 (FLJ13391), mRNA  |
| NM_032179 | Homo sapiens hypothetical protein FLJ20542 (FLJ20542), mRNA  |
| NM_032178 | Homo sapiens hypothetical protein FLJ13291 (FLJ13291), mRNA  |
| NM_032175 | Homo sapiens hypothetical protein FLJ12787 (FLJ12787), mRNA  |
| NM_032174 | Homo sapiens hypothetical protein FLJ12770 (FLJ12770), mRNA  |
| NM_032169 | Homo sapiens hypothetical protein FLJ12592 (FLJ12592), mRNA  |
| NM_032164 | Homo sapiens hypothetical protein FLJ12298 (FLJ12298), mRNA  |
| NM_032162 | Homo sapiens hypothetical protein FLJ11952 (FLJ11952), mRNA  |
| NM_032155 | Homo sapiens hypothetical protein DKFZp547I094 (DKFZp547I094), mRNA  |
| NM_032152 | Homo sapiens PRAM-1 protein (PRAM-1), mRNA   |
| NM_032149 | Homo sapiens hypothetical protein DKFZp434G072 (DKFZP434G072), mRNA  |
| NM_032147 | Homo sapiens hypothetical protein DKFZp434D0127 (DKFZP434D0127), mRNA  |
| NM_032146 | Homo sapiens hypothetical protein DKFZp434L1123 similar to mouse Arl6 (DKFZP434L1123), mRNA                    |
| NM_032143 | Homo sapiens hypothetical protein DKFZp434B1727 (DKFZP434B1727), mRNA  |
| NM_032142 | Homo sapiens hypothetical protein FLJ10352 (FLJ10352), mRNA  |
| NM_032141 | Homo sapiens hypothetical protein DKFZp434K1421 (DKFZP434K1421), mRNA  |
| NM_032140 | Homo sapiens hypothetical protein DKFZp434A1319 (DKFZP434A1319), mRNA  |
| NM_032135 | Homo sapiens hypothetical protein DKFZp434F1017 (DKFZP434F1017), mRNA  |
| NM_032134 | Homo sapiens hypothetical protein DKFZp434P0316 (DKFZP434P0316), mRNA  |
| NM_032131 | Homo sapiens hypothetical protein DKFZp434P0714 (DKFZP434P0714), mRNA  |
| NM_032130 | Homo sapiens hypothetical protein DKFZp434J0113 (DKFZP434J0113), mRNA  |
| NM_032129 | Homo sapiens hypothetical protein DKFZp434H2010 (DKFZP434H2010), mRNA  |
| NM_032128 | Homo sapiens hypothetical protein DKFZp566M114 (DKFZP566M114), mRNA  |
| NM_032127 | Homo sapiens hypothetical protein DKFZp566M1046 (DKFZP566M1046), mRNA  |
| NM_032126 | Homo sapiens hypothetical protein DKFZp564J047 (DKFZP564J047), mRNA  |
| NM_032124 | Homo sapiens hypothetical protein DKFZp564D1378 (DKFZP564D1378), mRNA  |
| NM_032121 | Homo sapiens hypothetical protein DKFZp564K142 similar to implantation-associated protein (DKFZp564K142), mRNA |
| NM_032118 | Homo sapiens hypothetical protein FLJ12953 similar to Mus musculus D3Mm3e (FLJ12953), mRNA                     |
| NM_032117 | Homo sapiens GAJ protein (GAJ), mRNA   |
| NM_032116 | Homo sapiens hypothetical protein MGC2599 similar to katanin p60 subunit A 12599 (MGC2599), mRNA               |
| NM_032112 | Homo sapiens mitochondrial ribosomal protein L43 (MRPL43), mRNA  |
| NM_020898 | Homo sapiens KIAA1536 protein (KIAA1536), mRNA   |
| NM_020726 | Homo sapiens neurolysin (metallopeptidase M3 family) (NLN), mRNA   |
| NM_020707 | Homo sapiens KIAA1173 protein (KIAA1173), mRNA   |
| NM_018670 | Homo sapiens hypothetical protein (IR1899308), mRNA  |

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| NM_018385 | Homo sapiens hypothetical protein FLJ11301 (FLJ11301), mRNA  |
| NM_018064 | Homo sapiens hypothetical protein FLJ10342 (FLJ10342), mRNA  |
| NM_017607 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12C (PPP1R12C), mRNA                |
| NM_015645 | Homo sapiens DKFZP586B0621 protein (CTRP5), mRNA   |
| NM_015528 | Homo sapiens DKFZP566H073 protein (DKFZP566H073), mRNA   |
| NM_015512 | Homo sapiens DKFZP434A236 protein (DKFZP434A236), mRNA   |
| NM_015426 | Homo sapiens DKFZP434C245 protein (DKFZP434C245), mRNA   |
| NM_015292 | Homo sapiens KIAA0747 protein (KIAA0747), mRNA   |
| NM_015236 | Homo sapiens KIAA0768 protein (LEC3), mRNA   |
| NM_015196 | Homo sapiens KIAA0922 protein (KIAA0922), mRNA   |
| NM_015112 | Homo sapiens KIAA0807 protein (MAST205), mRNA  |
| NM_015070 | Homo sapiens KIAA0853 protein (KIAA0853), mRNA   |
| NM_032308 | Homo sapiens hypothetical protein MGC4189 (MGC4189), mRNA  |
| NM_004801 | Homo sapiens neurexin 1 (NRXN1), mRNA  |
| NM_001221 | Homo sapiens calcium/calmodulin-dependent protein kinase (CaM kinase) II delta (CAMK2D), mRNA          |
| NM_015208 | Homo sapiens KIAA0874 protein (KIAA0874), mRNA   |
| NM_032043 | Homo sapiens BRCA1-interacting protein 1 (BRIPI), mRNA   |
| NM_032040 | Homo sapiens hypothetical protein DKFZp564K0322 (DKFZP564K0322), mRNA                                  |
| NM_032037 | Homo sapiens serine/threonine protein kinase SSTK (SSTK), mRNA   |
| NM_032033 | Homo sapiens FKSG43 (FKSG43), mRNA   |
| NM_032032 | Homo sapiens FKSG42 (FKSG42), mRNA   |
| NM_032031 | Homo sapiens FKSG17 (FKSG17), mRNA   |
| NM_032029 | Homo sapiens FKSG87 protein (FKSG87), mRNA   |
| NM_032026 | Homo sapiens CDA11 protein (CDA11), mRNA   |
| NM_032024 | Homo sapiens CDA017 protein (CDA017), mRNA   |
| NM_032023 | Homo sapiens AD037 protein (AD037), mRNA   |
| NM_032022 | Homo sapiens AD036 protein (AD036), mRNA   |
| NM_031956 | Homo sapiens NYD-SPI4 protein (NYD-SPI4), mRNA   |
| NM_031954 | Homo sapiens MSTP028 protein (MSTP028), mRNA   |
| NM_031953 | Homo sapiens MSTP043 protein (MSTP043), mRNA   |
| NM_031936 | Homo sapiens G protein-coupled receptor 61 (GPR61), mRNA   |
| NM_031934 | Homo sapiens RAB34, member RAS oncogene family (RAB34), mRNA   |
| NM_031933 | Homo sapiens wingless-type MMTV integration site family, member 8A (WNT8A), transcript variant 1, mRNA |
| NM_031932 | Homo sapiens testis transcript Y 14 (TTY14), mRNA  |
| NM_031931 | Homo sapiens testis transcript Y 13 (TTY13), mRNA  |
| NM_031930 | Homo sapiens testis transcript Y 12 (TTY12), mRNA  |
| NM_031929 | Homo sapiens testis transcript Y 11 (TTY11), mRNA  |
| NM_031927 | Homo sapiens testis transcript Y 9 (TTY9), mRNA  |
| NM_031926 | Homo sapiens testis transcript Y 7 (TTY7), mRNA  |
| NM_031925 | Homo sapiens transmembrane protein induced by tumor necrosis factor alpha (TMPIT), mRNA                |
| NM_031924 | Homo sapiens radial spoke protein 3 (RSP3), mRNA   |
| NM_031917 | Homo sapiens angiopoietin-related protein 5 (ARP5), mRNA   |
| NM_031948 | Homo sapiens marapsin (MPN), mRNA  |
| NM_031908 | Homo sapiens complement-clq tumor necrosis factor-related protein 2 (CTRP2), mRNA                      |
| NM_031905 | Homo sapiens hypothetical protein MGC3195 (MGC3195), mRNA  |
| NM_031889 | Homo sapiens enamelin (ENAM), mRNA   |

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| NM_022447 | Homo sapiens topoisomerase-related function protein 4-2 (TRF4-2), mRNA                              |
| NM_031485 | Homo sapiens glutamate rich WD repeat protein GRWD (GRWD), mRNA                                     |
| NM_031484 | Homo sapiens hypothetical protein MGC4415 (MGC4415), mRNA   |
| NM_031479 | Homo sapiens hypothetical protein MGC4638 (MGC4638), mRNA   |
| NM_031474 | Homo sapiens hypothetical protein DKFZp761G1913 (DKFZP761G1913), mRNA                               |
| NM_031466 | Homo sapiens KIAA1882 protein (MGC4737), mRNA   |
| NM_031465 | Homo sapiens hypothetical protein MGC13204 (MGC13204), mRNA   |
| NM_031464 | Homo sapiens hypothetical protein MGC11287 similar to ribosomal protein S6 kinase, (MGC11287), mRNA |
| NM_031459 | Homo sapiens sestrin 2 (SES2), mRNA   |
| NM_031455 | Homo sapiens hypothetical protein DKFZp761F241 (DKFZP761F241), mRNA                                 |
| NM_031453 | Homo sapiens hypothetical protein MGC11034 (MGC11034), mRNA   |
| NM_031452 | Homo sapiens hypothetical protein MGC2560 (MGC2560), mRNA   |
| NM_031449 | Homo sapiens KIAA1886 protein (DKFZP761I2123), mRNA   |
| NM_031447 | Homo sapiens hypothetical protein MGC13033 (MGC13033), mRNA   |
| NM_031446 | Homo sapiens hypothetical protein PNAS-131 (PNAS-131), mRNA   |
| NM_031437 | Homo sapiens hypothetical protein MGC10823 (MGC10823), mRNA   |
| NM_031436 | Homo sapiens hypothetical protein MGC10612 (MGC10612), mRNA   |
| NM_031435 | Homo sapiens hypothetical protein DKFZp564I0422 (DKFZP564I0422), mRNA                               |
| NM_031430 | Homo sapiens rab interacting lysosomal protein (RILP), mRNA   |
| NM_031425 | Homo sapiens hypothetical protein MGC10812 (MGC10812), mRNA   |
| NM_031423 | Homo sapiens hypothetical protein NUF2R (NUF2R), mRNA   |
| NM_031421 | Homo sapiens hypothetical protein DKFZp434H0115 (DKFZP434H0115), mRNA                               |
| NM_031412 | Homo sapiens GABA(A) receptor-associated protein like 1 (GABARAPL1), mRNA                           |
| NM_004637 | Homo sapiens RAB7, member RAS oncogene family (RAB7), mRNA  |
| NM_031283 | Homo sapiens HMG-box transcription factor TCF-3 (TCF-3), mRNA                                       |
| NM_031307 | Homo sapiens hypothetical protein FKSG32 (FKSG32), mRNA   |
| NM_031305 | Homo sapiens hypothetical protein DKFZp564B1162 (DKFZP564B1162), mRNA                               |
| NM_031301 | Homo sapiens hypothetical protein DKFZp564D0372 (DKFZP564D0372), mRNA                               |
| NM_031298 | Homo sapiens hypothetical protein MGC2963 (MGC2963), mRNA   |
| NM_031293 | Homo sapiens hypothetical protein DKFZp434G131 (DKFZP434G131), mRNA                                 |
| NM_031292 | Homo sapiens hypothetical protein DKFZp434G1415 (DKFZP434G1415), mRNA                               |
| NM_031288 | Homo sapiens PAP-1 binding protein (PAPA-1), mRNA   |
| NM_031284 | Homo sapiens hypothetical protein DKFZp434B195 (DKFZP434B195), mRNA                                 |
| NM_030972 | Homo sapiens hypothetical protein MGC5384 (MGC5384), mRNA   |
| NM_030901 | Homo sapiens olfactory receptor, family 7, subfamily A, member 17 (OR7A17), mRNA                    |
| NM_017990 | Homo sapiens hypothetical protein FLJ10079 (FLJ10079), mRNA   |
| NM_031219 | Homo sapiens hypothetical protein MGC12904 (MGC12904), mRNA   |
| NM_031218 | Homo sapiens hypothetical protein FLJ12488 (FLJ12488), mRNA   |
| NM_031214 | Homo sapiens hypothetical protein AF311304 (AF311304), mRNA   |
| NM_031210 | Homo sapiens hypothetical protein DC50 (DC50), mRNA   |
| NM_031207 | Homo sapiens hypothetical protein HT036 (HT036), mRNA   |
| NM_007013 | Homo sapiens WW domain-containing protein 1 (WWP1), mRNA  |
| NM_030897 | Homo sapiens hypothetical protein FLJ21617 (FLJ21617), mRNA   |
| NM_030978 | Homo sapiens hypothetical protein similar to actin related protein 2/3 complex,                     |



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|           | subunit 5 (MGC3038), mRNA   |
| NM_030971 | Homo sapiens similar to rat tricarboxylate carrier-like protein (BA108L7.2), mRNA   |
| NM_030965 | Homo sapiens similar to sialyltransferase 7 ((alpha-N-acetylneuraminy 2,3-betagalactosyl-1,3)-N-acetyl galactosaminide alpha-2,6-sialyltransferase) E (MGC3184), mRNA |
| NM_030960 | Homo sapiens sperm acrosome associated 1 (SPACA1), mRNA   |
| NM_030958 | Homo sapiens organic anion transporter polypeptide-related protein 4 (OATPRP4), mRNA  |
| NM_030952 | Homo sapiens hypothetical protein DKFZp434J037 (DKFZP434J037), mRNA   |
| NM_030940 | Homo sapiens hypothetical protein MGC4276 similar to CG8198 (MGC4276), mRNA   |
| NM_030937 | Homo sapiens hypothetical protein hCLA-iso (HCLA-ISO), mRNA   |
| NM_030929 | Homo sapiens hypothetical protein FKSG28 (FKSG28), mRNA   |
| NM_030921 | Homo sapiens hypothetical protein DC42 (DC42), mRNA   |
| NM_030917 | Homo sapiens hypothetical protein DKFZp586K0717 (DKFZP586K0717), mRNA   |
| NM_030915 | Homo sapiens hypothetical protein DKFZp566J091 (DKFZP566J091), mRNA   |
| NM_030914 | Homo sapiens hypothetical protein MGC2668 (MGC2668), mRNA   |
| NM_030907 | Homo sapiens hypothetical protein MGC10731 (MGC10731), mRNA   |
| NM_030895 | Homo sapiens hypothetical protein FLJ14129 (FLJ14129), mRNA   |
| NM_030891 | Homo sapiens leucine-rich repeat-containing 3 (LRRC3), mRNA   |
| NM_030755 | Homo sapiens thioredoxin domain-containing (TXNDC), mRNA  |
| NM_030819 | Homo sapiens hypothetical protein MGC11335 (MGC11335), mRNA   |
| NM_030814 | Homo sapiens hypothetical protein GL012 (GL012), mRNA   |
| NM_030810 | Homo sapiens hypothetical protein MGC3178 (MGC3178), mRNA   |
| NM_030804 | Homo sapiens hypothetical protein DKFZp434E2135 (DKFZP434E2135), mRNA   |
| NM_030794 | Homo sapiens hypothetical protein FLJ21007 (FLJ21007), mRNA   |
| NM_030759 | Homo sapiens nuclear receptor binding factor-2 (NRBF-2), mRNA   |
| NM_030795 | Homo sapiens stathmin-like 4 (STMN4), mRNA  |
| NM_020909 | Homo sapiens KIAA1548 protein (KIAA1548), mRNA  |
| NM_018023 | Homo sapiens hypothetical protein FLJ10201 (FLJ10201), mRNA   |
| NM_023009 | Homo sapiens macrophage myristoylated alanine-rich C kinase substrate (MACMARCKS), mRNA   |
| NM_025230 | Homo sapiens hypothetical protein PRO2389 (PRO2389), mRNA   |
| NM_025222 | Homo sapiens hypothetical protein PRO2730 (PRO2730), mRNA   |
| NM_025170 | Homo sapiens hypothetical protein FLJ12987 (FLJ12987), mRNA   |
| NM_024681 | Homo sapiens hypothetical protein FLJ12242 (FLJ12242), mRNA   |
| NM_024928 | Homo sapiens hypothetical protein FLJ22559 (FLJ22559), mRNA   |
| NM_017578 | Homo sapiens AKAP-binding sperm protein ropporin (DKFZp434B1222), mRNA  |
| NM_030642 | Homo sapiens apolipoprotein L, 5 (APOL5), mRNA  |
| NM_024513 | Homo sapiens FYVE and coiled-coil domain containing 1 (FYCO1), mRNA   |
| NM_030621 | Homo sapiens helicase-moi (KIAA0928), mRNA  |
| NM_030641 | Homo sapiens apolipoprotein L, 6 (APOL6), mRNA  |
| NM_025190 | Homo sapiens KIAA1641 protein (KIAA1641), mRNA  |
| NM_025040 | Homo sapiens hypothetical protein FLJ21941 (FLJ21941), mRNA   |
| NM_030613 | Homo sapiens hypothetical protein FLJ21628 (FLJ21628), mRNA   |
| NM_024820 | Homo sapiens KIAA1608 protein (KIAA1608), mRNA  |
| NM_018015 | Homo sapiens hypothetical protein FLJ10178 (FLJ10178), mRNA   |
| NM_024762 | Homo sapiens hypothetical protein FLJ21603 (FLJ21603), mRNA   |



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| NM_024329 | Homo sapiens hypothetical protein MGC4342 (MGC4342), mRNA   |
| NM_024087 | Homo sapiens DKFZP564L0862 protein (DKFZP564L0862), mRNA  |
| NM_030594 | Homo sapiens cytoplasmic polyadenylation element binding protein (CPEB1), mRNA                    |
| NM_025084 | Homo sapiens hypothetical protein FLJ22795 (FLJ22795), mRNA                                       |
| NM_025090 | Homo sapiens KIAA1453 protein (KIAA1453), mRNA  |
| NM_024939 | Homo sapiens hypothetical protein FLJ21918 (FLJ21918), mRNA                                       |
| NM_024903 | Homo sapiens hypothetical protein FLJ14297 (FLJ14297), mRNA                                       |
| NM_024793 | Homo sapiens KIAA0643 protein (KIAA0643), mRNA  |
| NM_024718 | Homo sapiens hypothetical protein FLJ10101 (FLJ10101), mRNA                                       |
| NM_015652 | Homo sapiens DKFZP564P1916 protein (DKFZP564P1916), mRNA  |
| NM_025189 | Homo sapiens hypothetical protein FLJ13659 (FLJ13659), mRNA                                       |
| NM_025021 | Homo sapiens KIAA0616 protein (KIAA0616), mRNA  |
| NM_025010 | Homo sapiens KIAA0795 protein (KIAA0795), mRNA  |
| NM_024894 | Homo sapiens hypothetical protein FLJ14075 (FLJ14075), mRNA                                       |
| NM_024840 | Homo sapiens hypothetical protein FLJ13590 (FLJ13590), mRNA                                       |
| NM_022782 | Homo sapiens M-phase phosphoprotein 9 (MPHOSPH9), mRNA  |
| NM_017558 | Homo sapiens hypothetical protein DKFZp434L0850 (DKFZp434L0850), mRNA                             |
| NM_030580 | Homo sapiens hypothetical protein MGC10520 (MGC10520), mRNA                                       |
| NM_025195 | Homo sapiens phosphoprotein regulated by mitogenic pathways (C8FW), mRNA                          |
| NM_030581 | Homo sapiens hypothetical protein FLJ12270 (FLJ12270), mRNA                                       |
| NM_030577 | Homo sapiens hypothetical protein MGC10993 (MGC10993), mRNA                                       |
| NM_030576 | Homo sapiens hypothetical protein MGC10986 (MGC10986), mRNA                                       |
| NM_030575 | Homo sapiens hypothetical protein MGC10334 (MGC10334), mRNA                                       |
| NM_030572 | Homo sapiens hypothetical protein MGC10946 (MGC10946), mRNA                                       |
| NM_030571 | Homo sapiens hypothetical protein MGC10924 similar to Nedd4 WW-binding protein 5 (MGC10924), mRNA |
| NM_030569 | Homo sapiens hypothetical protein MGC10848 (MGC10848), mRNA                                       |
| NM_030568 | Homo sapiens hypothetical protein MGC10818 (MGC10818), mRNA                                       |
| NM_030567 | Homo sapiens hypothetical protein MGC10772 (MGC10772), mRNA                                       |
| NM_025164 | Homo sapiens KIAA0999 protein (KIAA0999), mRNA  |
| NM_025132 | Homo sapiens KIAA1638 protein (KIAA1638), mRNA  |
| NM_024668 | Homo sapiens hypothetical protein FLJ20288 (FLJ20288), mRNA                                       |
| NM_024547 | Homo sapiens KIAA0467 protein (KIAA0467), mRNA  |
| NM_018418 | Homo sapiens hypothetical protein (HSD-3.1), mRNA   |
| NM_025182 | Homo sapiens hypothetical protein FLJ11560 (FLJ11560), mRNA                                       |
| NM_025168 | Homo sapiens LAP (leucine-rich repeats and PDZ) and no PDZ protein (LANO), mRNA                   |
| NM_025081 | Homo sapiens KIAA1305 protein (KIAA1305), mRNA  |
| NM_024750 | Homo sapiens leucine-rich repeat-containing 2 (LRRC2), mRNA                                       |
| NM_025266 | Homo sapiens hypothetical protein MGC2780 (MGC2780), mRNA   |
| NM_025265 | Homo sapiens hypothetical protein MGC2776 (MGC2776), mRNA   |
| NM_025264 | Homo sapiens hypothetical protein MGC2454 (MGC2454), mRNA   |
| NM_025247 | Homo sapiens hypothetical protein MGC5601 (MGC5601), mRNA   |
| NM_025246 | Homo sapiens hypothetical protein MGC3295 (MGC3295), mRNA   |
| NM_025234 | Homo sapiens recombination protein REC14 (REC14), mRNA  |
| NM_025221 | Homo sapiens calsenilin-like protein (CALP), mRNA   |
| NM_025207 | Homo sapiens hypothetical protein PP591 (PP591), mRNA   |
| NM_025204 | Homo sapiens hypothetical protein PP2447 (PP2447), mRNA   |
| NM_025203 | Homo sapiens hypothetical protein FLJ21945 (FLJ21945), mRNA                                       |
| NM_025199 | Homo sapiens hypothetical protein FLJ20886 (FLJ20886), mRNA                                       |

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| NM_025197 | Homo sapiens hypothetical protein FLJ13660 similar to CDK5 activator-binding protein C53 (FLJ13660), mRNA |
| NM_025187 | Homo sapiens hypothetical protein FLJ12076 (FLJ12076), mRNA   |
| NM_025184 | Homo sapiens hypothetical protein FLJ22843 (FLJ22843), mRNA   |
| NM_025181 | Homo sapiens hypothetical protein FLJ22004 (FLJ22004), mRNA   |
| NM_025163 | Homo sapiens hypothetical protein FLJ12768 (FLJ12768), mRNA   |
| NM_025159 | Homo sapiens hypothetical protein FLJ11577 (FLJ11577), mRNA   |
| NM_025157 | Homo sapiens hypothetical protein FLJ23042 (FLJ23042), mRNA   |
| NM_025155 | Homo sapiens hypothetical protein FLJ11848 (FLJ11848), mRNA   |
| NM_025152 | Homo sapiens hypothetical protein FLJ12660 (FLJ12660), mRNA   |
| NM_025150 | Homo sapiens hypothetical protein FLJ12528 (FLJ12528), mRNA   |
| NM_025147 | Homo sapiens hypothetical protein FLJ13448 (FLJ13448), mRNA   |
| NM_025146 | Homo sapiens hypothetical protein FLJ13194 (FLJ13194), mRNA   |
| NM_025145 | Homo sapiens hypothetical protein FLJ22944 (FLJ22944), mRNA   |
| NM_025143 | Homo sapiens hypothetical protein FLJ20856 (FLJ20856), mRNA   |
| NM_025140 | Homo sapiens hypothetical protein FLJ22471 (FLJ22471), mRNA   |
| NM_025139 | Homo sapiens hypothetical protein FLJ12584 (FLJ12584), mRNA   |
| NM_025134 | Homo sapiens hypothetical protein FLJ12178 (FLJ12178), mRNA   |
| NM_025133 | Homo sapiens hypothetical protein FLJ12673 (FLJ12673), mRNA   |
| NM_025130 | Homo sapiens hypothetical protein FLJ22761 (FLJ22761), mRNA   |
| NM_025129 | Homo sapiens hypothetical protein FLJ22688 (FLJ22688), mRNA   |
| NM_025118 | Homo sapiens hypothetical protein FLJ13310 (FLJ13310), mRNA   |
| NM_025115 | Homo sapiens hypothetical protein FLJ23263 (FLJ23263), mRNA   |
| NM_025113 | Homo sapiens hypothetical protein FLJ21562 (FLJ21562), mRNA   |
| NM_025112 | Homo sapiens hypothetical protein MGC11349 (MGC11349), mRNA   |
| NM_025108 | Homo sapiens hypothetical protein FLJ13909 (FLJ13909), mRNA   |
| NM_025107 | Homo sapiens hypothetical protein FLJ21269 (FLJ21269), mRNA   |
| NM_025105 | Homo sapiens hypothetical protein FLJ12409 (FLJ12409), mRNA   |
| NM_025104 | Homo sapiens hypothetical protein FLJ13087 (FLJ13087), mRNA   |
| NM_025103 | Homo sapiens capillary morphogenesis protein 1 (CMG1), mRNA   |
| NM_025100 | Homo sapiens hypothetical protein FLJ12294 (FLJ12294), mRNA   |
| NM_025093 | Homo sapiens hypothetical protein FLJ11827 (FLJ11827), mRNA   |
| NM_025092 | Homo sapiens hypothetical protein FLJ22635 (FLJ22635), mRNA   |
| NM_025088 | Homo sapiens hypothetical protein FLJ13241 (FLJ13241), mRNA   |
| NM_025087 | Homo sapiens hypothetical protein FLJ21511 (FLJ21511), mRNA   |
| NM_025082 | Homo sapiens hypothetical protein FLJ13111 (FLJ13111), mRNA   |
| NM_025075 | Homo sapiens hypothetical protein FLJ23445 (FLJ23445), mRNA   |
| NM_025074 | Homo sapiens hypothetical protein FLJ22031 (FLJ22031), mRNA   |
| NM_025073 | Homo sapiens hypothetical protein FLJ21168 (FLJ21168), mRNA   |
| NM_025071 | Homo sapiens hypothetical protein FLJ12190 (FLJ12190), mRNA   |
| NM_025069 | Homo sapiens hypothetical protein FLJ14299 (FLJ14299), mRNA   |
| NM_025067 | Homo sapiens hypothetical protein FLJ14106 (FLJ14106), mRNA   |
| NM_025064 | Homo sapiens hypothetical protein FLJ23604 (FLJ23604), mRNA   |
| NM_025063 | Homo sapiens hypothetical protein FLJ23550 (FLJ23550), mRNA   |
| NM_025059 | Homo sapiens hypothetical protein FLJ23305 (FLJ23305), mRNA   |
| NM_025057 | Homo sapiens hypothetical protein FLJ23189 (FLJ23189), mRNA   |
| NM_025056 | Homo sapiens hypothetical protein FLJ23185 (FLJ23185), mRNA   |
| NM_025052 | Homo sapiens hypothetical protein FLJ23074 (FLJ23074), mRNA   |
| NM_025049 | Homo sapiens hypothetical protein FLJ22692 (FLJ22692), mRNA   |
| NM_025048 | Homo sapiens hypothetical protein FLJ22684 (FLJ22684), mRNA   |
| NM_025047 | Homo sapiens hypothetical protein FLJ22595 (FLJ22595), mRNA   |

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| NM_025045 | Homo sapiens hypothetical protein FLJ22582 (FLJ22582), mRNA            |
| NM_025031 | Homo sapiens hypothetical protein FLJ21075 (FLJ21075), mRNA            |
| NM_025030 | Homo sapiens hypothetical protein FLJ20972 (FLJ20972), mRNA            |
| NM_025026 | Homo sapiens hypothetical protein FLJ14107 (FLJ14107), mRNA            |
| NM_025025 | Homo sapiens hypothetical protein FLJ14100 (FLJ14100), mRNA            |
| NM_025024 | Homo sapiens hypothetical protein FLJ14082 (FLJ14082), mRNA            |
| NM_025023 | Homo sapiens hypothetical protein FLJ14069 (FLJ14069), mRNA            |
| NM_025019 | Homo sapiens likely ortholog of mouse tubulin alpha 4 (FLJ13940), mRNA |
| NM_025012 | Homo sapiens hypothetical protein FLJ13769 (FLJ13769), mRNA            |
| NM_025009 | Homo sapiens hypothetical protein FLJ13621 (FLJ13621), mRNA            |
| NM_025008 | Homo sapiens hypothetical protein FLJ13544 (FLJ13544), mRNA            |
| NM_025006 | Homo sapiens hypothetical protein FLJ13373 (FLJ13373), mRNA            |
| NM_025004 | Homo sapiens hypothetical protein FLJ13215 (FLJ13215), mRNA            |
| NM_025003 | Homo sapiens hypothetical protein FLJ13166 (FLJ13166), mRNA            |
| NM_025002 | Homo sapiens hypothetical protein FLJ13162 (FLJ13162), mRNA            |
| NM_025001 | Homo sapiens hypothetical protein FLJ13105 (FLJ13105), mRNA            |
| NM_025000 | Homo sapiens hypothetical protein FLJ13096 (FLJ13096), mRNA            |
| NM_024997 | Homo sapiens hypothetical protein FLJ12668 (FLJ12668), mRNA            |
| NM_024993 | Homo sapiens hypothetical protein FLJ12568 (FLJ12568), mRNA            |
| NM_024992 | Homo sapiens hypothetical protein FLJ12547 (FLJ12547), mRNA            |
| NM_024989 | Homo sapiens hypothetical protein FLJ12377 (FLJ12377), mRNA            |
| NM_024988 | Homo sapiens hypothetical protein FLJ12355 (FLJ12355), mRNA            |
| NM_024986 | Homo sapiens hypothetical protein FLJ12331 (FLJ12331), mRNA            |
| NM_024980 | Homo sapiens hypothetical protein FLJ12132 (FLJ12132), mRNA            |
| NM_024979 | Homo sapiens hypothetical protein FLJ12122 (FLJ12122), mRNA            |
| NM_024978 | Homo sapiens hypothetical protein FLJ12121 (FLJ12121), mRNA            |
| NM_024971 | Homo sapiens hypothetical protein FLJ11726 (FLJ11726), mRNA            |
| NM_024970 | Homo sapiens hypothetical protein FLJ11722 (FLJ11722), mRNA            |
| NM_024969 | Homo sapiens hypothetical protein FLJ11703 (FLJ11703), mRNA            |
| NM_024966 | Homo sapiens hypothetical protein FLJ11598 (FLJ11598), mRNA            |
| NM_024961 | Homo sapiens hypothetical protein FLJ11370 (FLJ11370), mRNA            |
| NM_024959 | Homo sapiens hypothetical protein FLJ22233 (FLJ22233), mRNA            |
| NM_024957 | Homo sapiens hypothetical protein FLJ22686 (FLJ22686), mRNA            |
| NM_024955 | Homo sapiens hypothetical protein FLJ23322 (FLJ23322), mRNA            |
| NM_024954 | Homo sapiens hypothetical protein FLJ11807 (FLJ11807), mRNA            |
| NM_024952 | Homo sapiens hypothetical protein FLJ20950 (FLJ20950), mRNA            |
| NM_024950 | Homo sapiens hypothetical protein FLJ12891 (FLJ12891), mRNA            |
| NM_024949 | Homo sapiens hypothetical protein FLJ22029 (FLJ22029), mRNA            |
| NM_024948 | Homo sapiens hypothetical protein FLJ13397 (FLJ13397), mRNA            |
| NM_024946 | Homo sapiens hypothetical protein FLJ21799 (FLJ21799), mRNA            |
| NM_024945 | Homo sapiens hypothetical protein FLJ12888 (FLJ12888), mRNA            |
| NM_024943 | Homo sapiens hypothetical protein FLJ23235 (FLJ23235), mRNA            |
| NM_024940 | Homo sapiens hypothetical protein FLJ21034 (FLJ21034), mRNA            |
| NM_024937 | Homo sapiens hypothetical protein FLJ12929 (FLJ12929), mRNA            |
| NM_024936 | Homo sapiens hypothetical protein FLJ23024 (FLJ23024), mRNA            |
| NM_024929 | Homo sapiens hypothetical protein FLJ23112 (FLJ23112), mRNA            |
| NM_024927 | Homo sapiens hypothetical protein FLJ21019 (FLJ21019), mRNA            |
| NM_024926 | Homo sapiens hypothetical protein FLJ12571 (FLJ12571), mRNA            |
| NM_024923 | Homo sapiens hypothetical protein FLJ22389 (FLJ22389), mRNA            |
| NM_024922 | Homo sapiens hypothetical protein FLJ21736 (FLJ21736), mRNA            |
| NM_024921 | Homo sapiens hypothetical protein FLJ22792 (FLJ22792), mRNA            |

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| NM_024916 | Homo sapiens hypothetical protein FLJ22814 (FLJ22814), mRNA |
| NM_024915 | Homo sapiens hypothetical protein FLJ13782 (FLJ13782), mRNA |
| NM_024913 | Homo sapiens hypothetical protein FLJ21986 (FLJ21986), mRNA |
| NM_024912 | Homo sapiens hypothetical protein FLJ14327 (FLJ14327), mRNA |
| NM_024910 | Homo sapiens hypothetical protein FLJ12700 (FLJ12700), mRNA |
| NM_024902 | Homo sapiens hypothetical protein FLJ13236 (FLJ13236), mRNA |
| NM_024901 | Homo sapiens hypothetical protein FLJ22457 (FLJ22457), mRNA |
| NM_024899 | Homo sapiens hypothetical protein FLJ12542 (FLJ12542), mRNA |
| NM_024895 | Homo sapiens hypothetical protein FLJ23209 (FLJ23209), mRNA |
| NM_024892 | Homo sapiens hypothetical protein FLJ11700 (FLJ11700), mRNA |
| NM_024891 | Homo sapiens hypothetical protein FLJ11783 (FLJ11783), mRNA |
| NM_024888 | Homo sapiens hypothetical protein FLJ11535 (FLJ11535), mRNA |
| NM_024887 | Homo sapiens hypothetical protein FLJ13102 (FLJ13102), mRNA |
| NM_024884 | Homo sapiens hypothetical protein FLJ12618 (FLJ12618), mRNA |
| NM_024883 | Homo sapiens hypothetical protein FLJ22202 (FLJ22202), mRNA |
| NM_024881 | Homo sapiens hypothetical protein FLJ14251 (FLJ14251), mRNA |
| NM_024876 | Homo sapiens hypothetical protein FLJ12229 (FLJ12229), mRNA |
| NM_024875 | Homo sapiens hypothetical protein FLJ12921 (FLJ12921), mRNA |
| NM_024872 | Homo sapiens hypothetical protein FLJ22570 (FLJ22570), mRNA |
| NM_024871 | Homo sapiens hypothetical protein FLJ12748 (FLJ12748), mRNA |
| NM_024869 | Homo sapiens hypothetical protein FLJ14050 (FLJ14050), mRNA |
| NM_024868 | Homo sapiens hypothetical protein FLJ14124 (FLJ14124), mRNA |
| NM_024866 | Homo sapiens hypothetical protein FLJ21135 (FLJ21135), mRNA |
| NM_024865 | Homo sapiens hypothetical protein FLJ12581 (FLJ12581), mRNA |
| NM_024863 | Homo sapiens hypothetical protein FLJ21174 (FLJ21174), mRNA |
| NM_024862 | Homo sapiens hypothetical protein FLJ13962 (FLJ13962), mRNA |
| NM_024860 | Homo sapiens hypothetical protein FLJ21148 (FLJ21148), mRNA |
| NM_024857 | Homo sapiens hypothetical protein FLJ12735 (FLJ12735), mRNA |
| NM_024855 | Homo sapiens hypothetical protein FLJ12785 (FLJ12785), mRNA |
| NM_024854 | Homo sapiens hypothetical protein FLJ22028 (FLJ22028), mRNA |
| NM_024852 | Homo sapiens hypothetical protein FLJ12765 (FLJ12765), mRNA |
| NM_024850 | Homo sapiens hypothetical protein FLJ21458 (FLJ21458), mRNA |
| NM_024849 | Homo sapiens hypothetical protein FLJ14126 (FLJ14126), mRNA |
| NM_024846 | Homo sapiens hypothetical protein FLJ11710 (FLJ11710), mRNA |
| NM_024845 | Homo sapiens hypothetical protein FLJ14154 (FLJ14154), mRNA |
| NM_024844 | Homo sapiens hypothetical protein FLJ12549 (FLJ12549), mRNA |
| NM_024843 | Homo sapiens duodenal cytochrome b (FLJ23462), mRNA         |
| NM_024838 | Homo sapiens hypothetical protein FLJ22002 (FLJ22002), mRNA |
| NM_024834 | Homo sapiens hypothetical protein FLJ13081 (FLJ13081), mRNA |
| NM_024833 | Homo sapiens hypothetical protein FLJ23506 (FLJ23506), mRNA |
| NM_024830 | Homo sapiens hypothetical protein FLJ12443 (FLJ12443), mRNA |
| NM_024829 | Homo sapiens hypothetical protein FLJ22662 (FLJ22662), mRNA |
| NM_024828 | Homo sapiens hypothetical protein FLJ13657 (FLJ13657), mRNA |
| NM_024827 | Homo sapiens hypothetical protein FLJ22237 (FLJ22237), mRNA |
| NM_024826 | Homo sapiens hypothetical protein FLJ21159 (FLJ21159), mRNA |
| NM_024825 | Homo sapiens hypothetical protein FLJ23447 (FLJ23447), mRNA |
| NM_024824 | Homo sapiens hypothetical protein FLJ11806 (FLJ11806), mRNA |
| NM_024823 | Homo sapiens hypothetical protein FLJ21596 (FLJ21596), mRNA |
| NM_024821 | Homo sapiens hypothetical protein FLJ22349 (FLJ22349), mRNA |
| NM_024818 | Homo sapiens hypothetical protein FLJ23251 (FLJ23251), mRNA |
| NM_024817 | Homo sapiens hypothetical protein FLJ13710 (FLJ13710), mRNA |

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| NM_024814 | Homo sapiens hypothetical protein FLJ23109 (FLJ23109), mRNA                            |
| NM_024802 | Homo sapiens hypothetical protein FLJ21369 (FLJ21369), mRNA                            |
| NM_024801 | Homo sapiens hypothetical protein FLJ21551 (FLJ21551), mRNA                            |
| NM_024800 | Homo sapiens hypothetical protein FLJ23495 (FLJ23495), mRNA                            |
| NM_024798 | Homo sapiens hypothetical protein FLJ13952 (FLJ13952), mRNA                            |
| NM_024794 | Homo sapiens hypothetical protein FLJ22408 (FLJ22408), mRNA                            |
| NM_024792 | Homo sapiens hypothetical protein FLJ22282 (FLJ22282), mRNA                            |
| NM_024791 | Homo sapiens hypothetical protein FLJ22756 (FLJ22756), mRNA                            |
| NM_024790 | Homo sapiens hypothetical protein FLJ22490 (FLJ22490), mRNA                            |
| NM_024788 | Homo sapiens hypothetical protein FLJ21062 (FLJ21062), mRNA                            |
| NM_024787 | Homo sapiens hypothetical protein FLJ12526 (FLJ12526), mRNA                            |
| NM_024786 | Homo sapiens hypothetical protein FLJ13153 (FLJ13153), mRNA                            |
| NM_024785 | Homo sapiens hypothetical protein FLJ22746 (FLJ22746), mRNA                            |
| NM_024783 | Homo sapiens hypothetical protein FLJ23598 (FLJ23598), mRNA                            |
| NM_024782 | Homo sapiens hypothetical protein FLJ12610 (FLJ12610), mRNA                            |
| NM_024781 | Homo sapiens hypothetical protein FLJ23594 (FLJ23594), mRNA                            |
| NM_024779 | Homo sapiens hypothetical protein FLJ22055 (FLJ22055), mRNA                            |
| NM_024778 | Homo sapiens hypothetical protein FLJ22612 (FLJ22612), mRNA                            |
| NM_024776 | Homo sapiens hypothetical protein FLJ21140 (FLJ21140), mRNA                            |
| NM_024774 | Homo sapiens hypothetical protein FLJ21924 (FLJ21924), mRNA                            |
| NM_024770 | Homo sapiens hypothetical protein FLJ13984 (FLJ13984), mRNA                            |
| NM_024768 | Homo sapiens hypothetical protein FLJ12057 (FLJ12057), mRNA                            |
| NM_024766 | Homo sapiens hypothetical protein FLJ23451 (FLJ23451), mRNA                            |
| NM_024765 | Homo sapiens hypothetical protein FLJ12401 (FLJ12401), mRNA                            |
| NM_024764 | Homo sapiens hypothetical protein FLJ14298 (FLJ14298), mRNA                            |
| NM_024761 | Homo sapiens hypothetical protein FLJ13204 (FLJ13204), mRNA                            |
| NM_024759 | Homo sapiens hypothetical protein FLJ13955 (FLJ13955), mRNA                            |
| NM_024757 | Homo sapiens hypothetical protein FLJ12879 (FLJ12879), mRNA                            |
| NM_024756 | Homo sapiens hypothetical protein FLJ13465 (FLJ13465), mRNA                            |
| NM_024755 | Homo sapiens hypothetical protein FLJ13213 (FLJ13213), mRNA                            |
| NM_024753 | Homo sapiens hypothetical protein FLJ11457 (FLJ11457), mRNA                            |
| NM_024751 | Homo sapiens hypothetical protein FLJ13273 (FLJ13273), mRNA                            |
| NM_024748 | Homo sapiens hypothetical protein FLJ11539 (FLJ11539), mRNA                            |
| NM_024747 | Homo sapiens hypothetical protein FLJ22501 (FLJ22501), mRNA                            |
| NM_024745 | Homo sapiens hypothetical protein FLJ22009 (FLJ22009), mRNA                            |
| NM_024743 | Homo sapiens hypothetical protein FLJ21934 (FLJ21934), mRNA                            |
| NM_024738 | Homo sapiens hypothetical protein FLJ21415 (FLJ21415), mRNA                            |
| NM_024736 | Homo sapiens hypothetical protein FLJ12150 (FLJ12150), mRNA                            |
| NM_024735 | Homo sapiens hypothetical protein FLJ22477 (FLJ22477), mRNA                            |
| NM_024734 | Homo sapiens calponin like transmembrane domain protein (calmin), mRNA                 |
| NM_024733 | Homo sapiens hypothetical protein FLJ14345 (FLJ14345), mRNA                            |
| NM_024730 | Homo sapiens hypothetical protein FLJ22655 (FLJ22655), mRNA                            |
| NM_024729 | Homo sapiens hypothetical protein FLJ13881 (FLJ13881), mRNA                            |
| NM_024728 | Homo sapiens hypothetical protein FLJ11808 (FLJ11808), mRNA                            |
| NM_024725 | Homo sapiens hypothetical protein FLJ23518 (FLJ23518), mRNA                            |
| NM_024724 | Homo sapiens hypothetical protein FLJ22332 (FLJ22332), mRNA                            |
| NM_024721 | Homo sapiens likely ortholog of mouse zinc finger homeodomain 4 (FLJ20980), mRNA       |
| NM_024713 | Homo sapiens hypothetical protein FLJ22557 (FLJ22557), mRNA                            |
| NM_024712 | Homo sapiens engulfment and cell motility 3 (ced-12 homolog, C. elegans) (ELMO3), mRNA |
| NM_024711 | Homo sapiens hypothetical protein FLJ22690 (FLJ22690), mRNA                            |

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| NM_024710 | Homo sapiens hypothetical protein FLJ23469 (FLJ23469), mRNA                       |
| NM_024708 | Homo sapiens hypothetical protein FLJ22551 (FLJ22551), mRNA                       |
| NM_024707 | Homo sapiens hypothetical protein FLJ13956 (FLJ13956), mRNA                       |
| NM_024706 | Homo sapiens hypothetical protein FLJ13479 (FLJ13479), mRNA                       |
| NM_024704 | Homo sapiens hypothetical protein FLJ23045 (FLJ23045), mRNA                       |
| NM_024702 | Homo sapiens hypothetical protein FLJ13841 (FLJ13841), mRNA                       |
| NM_024699 | Homo sapiens hypothetical protein FLJ14007 (FLJ14007), mRNA                       |
| NM_024697 | Homo sapiens hypothetical protein FLJ22419 (FLJ22419), mRNA                       |
| NM_024696 | Homo sapiens hypothetical protein FLJ23058 (FLJ23058), mRNA                       |
| NM_024694 | Homo sapiens hypothetical protein FLJ23121 (FLJ23121), mRNA                       |
| NM_024691 | Homo sapiens hypothetical protein FLJ23233 (FLJ23233), mRNA                       |
| NM_024685 | Homo sapiens hypothetical protein FLJ23560 (FLJ23560), mRNA                       |
| NM_024682 | Homo sapiens hypothetical protein FLJ12168 (FLJ12168), mRNA                       |
| NM_024680 | Homo sapiens hypothetical protein FLJ23311 (FLJ23311), mRNA                       |
| NM_024679 | Homo sapiens hypothetical protein FLJ11939 (FLJ11939), mRNA                       |
| NM_024677 | Homo sapiens hypothetical protein FLJ14001 (FLJ14001), mRNA                       |
| NM_024676 | Homo sapiens hypothetical protein FLJ22938 (FLJ22938), mRNA                       |
| NM_024674 | Homo sapiens hypothetical protein FLJ12457 (FLJ12457), mRNA                       |
| NM_024671 | Homo sapiens hypothetical protein FLJ23436 (FLJ23436), mRNA                       |
| NM_024669 | Homo sapiens hypothetical protein FLJ11795 (FLJ11795), mRNA                       |
| NM_024667 | Homo sapiens hypothetical protein FLJ12750 (FLJ12750), mRNA                       |
| NM_024665 | Homo sapiens nuclear receptor co-repressor/HDAC3 complex subunit (FLJ12894), mRNA |
| NM_024664 | Homo sapiens hypothetical protein FLJ11838 (FLJ11838), mRNA                       |
| NM_024661 | Homo sapiens hypothetical protein FLJ12436 (FLJ12436), mRNA                       |
| NM_024660 | Homo sapiens hypothetical protein FLJ22573 (FLJ22573), mRNA                       |
| NM_024659 | Homo sapiens hypothetical protein FLJ11753 (FLJ11753), mRNA                       |
| NM_024658 | Homo sapiens hypothetical protein FLJ23338 (FLJ23338), mRNA                       |
| NM_024657 | Homo sapiens hypothetical protein FLJ11565 (FLJ11565), mRNA                       |
| NM_024656 | Homo sapiens hypothetical protein FLJ22329 (FLJ22329), mRNA                       |
| NM_024653 | Homo sapiens hypothetical protein FLJ13902 (FLJ13902), mRNA                       |
| NM_024652 | Homo sapiens hypothetical protein FLJ23119 (FLJ23119), mRNA                       |
| NM_024645 | Homo sapiens hypothetical protein FLJ13842 (FLJ13842), mRNA                       |
| NM_024644 | Homo sapiens hypothetical protein FLJ21802 (FLJ21802), mRNA                       |
| NM_024643 | Homo sapiens hypothetical protein FLJ23093 (FLJ23093), mRNA                       |
| NM_024642 | Homo sapiens hypothetical protein FLJ21212 (FLJ21212), mRNA                       |
| NM_024639 | Homo sapiens hypothetical protein FLJ23393 (FLJ23393), mRNA                       |
| NM_024638 | Homo sapiens hypothetical protein FLJ12960 (FLJ12960), mRNA                       |
| NM_024635 | Homo sapiens hypothetical protein FLJ22643 (FLJ22643), mRNA                       |
| NM_024633 | Homo sapiens hypothetical protein FLJ21276 (FLJ21276), mRNA                       |
| NM_024632 | Homo sapiens hypothetical protein FLJ11526 (FLJ11526), mRNA                       |
| NM_024631 | Homo sapiens hypothetical protein FLJ23342 (FLJ23342), mRNA                       |
| NM_024630 | Homo sapiens hypothetical protein FLJ20984 (FLJ20984), mRNA                       |
| NM_024629 | Homo sapiens hypothetical protein FLJ23468 (FLJ23468), mRNA                       |
| NM_024623 | Homo sapiens hypothetical protein FLJ13491 (FLJ13491), mRNA                       |
| NM_024620 | Homo sapiens hypothetical protein FLJ12586 (FLJ12586), mRNA                       |
| NM_024619 | Homo sapiens hypothetical protein FLJ12171 (FLJ12171), mRNA                       |
| NM_024618 | Homo sapiens hypothetical protein FLJ21478 (FLJ21478), mRNA                       |
| NM_024614 | Homo sapiens hypothetical protein FLJ13197 (FLJ13197), mRNA                       |
| NM_024612 | Homo sapiens hypothetical protein FLJ22060 (FLJ22060), mRNA                       |
| NM_024608 | Homo sapiens hypothetical protein FLJ22402 (FLJ22402), mRNA                       |

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| NM_024607 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 3B (PPP1R3B), mRNA |
| NM_024604 | Homo sapiens hypothetical protein FLJ21908 (FLJ21908), mRNA                           |
| NM_024603 | Homo sapiens hypothetical protein FLJ11588 (FLJ11588), mRNA                           |
| NM_024599 | Homo sapiens hypothetical protein FLJ22341 (FLJ22341), mRNA                           |
| NM_024598 | Homo sapiens hypothetical protein FLJ13154 (FLJ13154), mRNA                           |
| NM_024597 | Homo sapiens hypothetical protein FLJ12649 (FLJ12649), mRNA                           |
| NM_024596 | Homo sapiens hypothetical protein FLJ12847 (FLJ12847), mRNA                           |
| NM_024594 | Homo sapiens hypothetical protein FLJ12899 (FLJ12899), mRNA                           |
| NM_024593 | Homo sapiens hypothetical protein FLJ11767 (FLJ11767), mRNA                           |
| NM_024592 | Homo sapiens hypothetical protein FLJ13352 (FLJ13352), mRNA                           |
| NM_024590 | Homo sapiens hypothetical protein FLJ23548 (FLJ23548), mRNA                           |
| NM_024589 | Homo sapiens hypothetical protein FLJ22386 (FLJ22386), mRNA                           |
| NM_024588 | Homo sapiens hypothetical protein FLJ23584 (FLJ23584), mRNA                           |
| NM_024587 | Homo sapiens hypothetical protein FLJ22353 (FLJ22353), mRNA                           |
| NM_024583 | Homo sapiens hypothetical protein FLJ23142 (FLJ23142), mRNA                           |
| NM_024582 | Homo sapiens hypothetical protein FLJ23056 (FLJ23056), mRNA                           |
| NM_024581 | Homo sapiens hypothetical protein FLJ13942 (FLJ13942), mRNA                           |
| NM_024579 | Homo sapiens hypothetical protein FLJ23221 (FLJ23221), mRNA                           |
| NM_024578 | Homo sapiens hypothetical protein FLJ22709 (FLJ22709), mRNA                           |
| NM_024577 | Homo sapiens hypothetical protein FLJ13605 (FLJ13605), mRNA                           |
| NM_024576 | Homo sapiens hypothetical protein FLJ21079 (FLJ21079), mRNA                           |
| NM_024575 | Homo sapiens hypothetical protein FLJ23467 (FLJ23467), mRNA                           |
| NM_024574 | Homo sapiens hypothetical protein FLJ23191 (FLJ23191), mRNA                           |
| NM_024573 | Homo sapiens hypothetical protein FLJ12910 (FLJ12910), mRNA                           |
| NM_024572 | Homo sapiens hypothetical protein FLJ12691 (FLJ12691), mRNA                           |
| NM_024569 | Homo sapiens hypothetical protein FLJ21047 (FLJ21047), mRNA                           |
| NM_024567 | Homo sapiens hypothetical protein FLJ21616 (FLJ21616), mRNA                           |
| NM_024564 | Homo sapiens hypothetical protein FLJ11715 (FLJ11715), mRNA                           |
| NM_024563 | Homo sapiens hypothetical protein FLJ14054 (FLJ14054), mRNA                           |
| NM_024560 | Homo sapiens hypothetical protein FLJ21963 (FLJ21963), mRNA                           |
| NM_024558 | Homo sapiens hypothetical protein FLJ13920 (FLJ13920), mRNA                           |
| NM_024557 | Homo sapiens hypothetical protein FLJ11608 (FLJ11608), mRNA                           |
| NM_024554 | Homo sapiens hypothetical protein FLJ11413 (FLJ11413), mRNA                           |
| NM_024548 | Homo sapiens hypothetical protein FLJ23047 (FLJ23047), mRNA                           |
| NM_024545 | Homo sapiens hypothetical protein FLJ12761 (FLJ12761), mRNA                           |
| NM_024544 | Homo sapiens hypothetical protein FLJ12875 (FLJ12875), mRNA                           |
| NM_024541 | Homo sapiens hypothetical protein FLJ13114 (FLJ13114), mRNA                           |
| NM_024539 | Homo sapiens hypothetical protein FLJ23516 (FLJ23516), mRNA                           |
| NM_024537 | Homo sapiens hypothetical protein FLJ12118 (FLJ12118), mRNA                           |
| NM_024536 | Homo sapiens hypothetical protein FLJ22678 (FLJ22678), mRNA                           |
| NM_024535 | Homo sapiens hypothetical protein FLJ22021 (FLJ22021), mRNA                           |
| NM_024533 | Homo sapiens hypothetical protein FLJ22167 (FLJ22167), mRNA                           |
| NM_024531 | Homo sapiens hypothetical protein FLJ11856 (FLJ11856), mRNA                           |
| NM_024530 | Homo sapiens hypothetical protein FLJ23306 (FLJ23306), mRNA                           |
| NM_024528 | Homo sapiens hypothetical protein FLJ22626 (FLJ22626), mRNA                           |
| NM_024527 | Homo sapiens hypothetical protein FLJ11743 (FLJ11743), mRNA                           |
| NM_024525 | Homo sapiens hypothetical protein FLJ22584 (FLJ22584), mRNA                           |
| NM_024524 | Homo sapiens hypothetical protein FLJ20986 (FLJ20986), mRNA                           |
| NM_024521 | Homo sapiens hypothetical protein FLJ21459 (FLJ21459), mRNA                           |
| NM_024520 | Homo sapiens hypothetical protein FLJ22555 (FLJ22555), mRNA                           |



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| NM_024519 | Homo sapiens hypothetical protein FLJ13725 (FLJ13725), mRNA                              |
| NM_024509 | Homo sapiens hypothetical protein MGC2656 (MGC2656), mRNA                                |
| NM_024506 | Homo sapiens hypothetical protein MGC10771 (MGC10771), mRNA                              |
| NM_022893 | Homo sapiens B-cell CLL/lymphoma 11A (zinc finger protein) (BCL11A), mRNA                |
| NM_015113 | Homo sapiens KIAA0399 protein (KIAA0399), mRNA   |
| NM_015545 | Homo sapiens KIAA0632 protein (KIAA0632), mRNA   |
| NM_020299 | Homo sapiens aldo-keto reductase family 1, member B10 (aldose reductase) (AKR1B10), mRNA |
| NM_003308 | Homo sapiens testis specific protein, Y-linked (TSPY), mRNA                              |
| NM_024339 | Homo sapiens hypothetical protein MGC2655 (MGC2655), mRNA                                |
| NM_024334 | Homo sapiens hypothetical protein MGC3222 (MGC3222), mRNA                                |
| NM_024328 | Homo sapiens hypothetical protein MGC2652 (MGC2652), mRNA                                |
| NM_024327 | Homo sapiens hypothetical protein MGC2508 (MGC2508), mRNA                                |
| NM_024323 | Homo sapiens hypothetical protein MGC11271 (MGC11271), mRNA                              |
| NM_024322 | Homo sapiens hypothetical protein MGC11266 (MGC11266), mRNA                              |
| NM_024320 | Homo sapiens hypothetical protein MGC11242 (MGC11242), mRNA                              |
| NM_024319 | Homo sapiens hypothetical protein MGC4174 (MGC4174), mRNA                                |
| NM_024314 | Homo sapiens hypothetical protein MGC4294 (MGC4294), mRNA                                |
| NM_024313 | Homo sapiens hypothetical protein MGC3731 (MGC3731), mRNA                                |
| NM_024310 | Homo sapiens hypothetical protein MGC4090 (MGC4090), mRNA                                |
| NM_024303 | Homo sapiens hypothetical protein MGC4161 (MGC4161), mRNA                                |
| NM_024297 | Homo sapiens hypothetical protein MGC2941 (MGC2941), mRNA                                |
| NM_024293 | Homo sapiens hypothetical protein MGC3035 (MGC3035), mRNA                                |
| NM_023003 | Homo sapiens transmembrane 6 superfamily member 1 (TM6SF1), mRNA                         |
| NM_015254 | Homo sapiens kinesin family member 13B (KIF13B), mRNA                                    |
| NM_015127 | Homo sapiens Mid-1-related chloride channel 1 (KIAA0761), mRNA                           |
| NM_024033 | Homo sapiens hypothetical protein MGC5242 (MGC5242), mRNA                                |
| NM_024122 | Homo sapiens hypothetical protein MGC4825 (MGC4825), mRNA                                |
| NM_024121 | Homo sapiens hypothetical protein FLJ20979 (FLJ20979), mRNA                              |
| NM_024119 | Homo sapiens hypothetical protein FLJ11354 (FLJ11354), mRNA                              |
| NM_024117 | Homo sapiens hypothetical protein MGC2745 (MGC2745), mRNA                                |
| NM_024115 | Homo sapiens hypothetical protein MGC4309 (MGC4309), mRNA                                |
| NM_024111 | Homo sapiens hypothetical protein MGC4504 (MGC4504), mRNA                                |
| NM_024109 | Homo sapiens hypothetical protein MGC2654 (MGC2654), mRNA                                |
| NM_024108 | Homo sapiens hypothetical protein MGC2650 (MGC2650), mRNA                                |
| NM_024107 | Homo sapiens hypothetical protein MGC3123 (MGC3123), mRNA                                |
| NM_024106 | Homo sapiens hypothetical protein MGC2663 (MGC2663), mRNA                                |
| NM_024104 | Homo sapiens hypothetical protein MGC2747 (MGC2747), mRNA                                |
| NM_024102 | Homo sapiens hypothetical protein MGC2722 (MGC2722), mRNA                                |
| NM_024097 | Homo sapiens hypothetical protein MGC955 (MGC955), mRNA                                  |
| NM_024094 | Homo sapiens hypothetical protein MGC5528 (MGC5528), mRNA                                |
| NM_024093 | Homo sapiens hypothetical protein MGC5509 (MGC5509), mRNA                                |
| NM_024090 | Homo sapiens hypothetical protein MGC5487 (LCE), mRNA                                    |
| NM_024086 | Homo sapiens hypothetical protein MGC3329 (MGC3329), mRNA                                |
| NM_024085 | Homo sapiens hypothetical protein FLJ22169 (FLJ22169), mRNA                              |
| NM_024080 | Homo sapiens hypothetical protein MGC2849 (MGC2849), mRNA                                |
| NM_024076 | Homo sapiens hypothetical protein MGC2628 (MGC2628), mRNA                                |
| NM_024074 | Homo sapiens hypothetical protein MGC3169 (MGC3169), mRNA                                |
| NM_024071 | Homo sapiens hypothetical protein MGC2550 (MGC2550), mRNA                                |
| NM_024070 | Homo sapiens hypothetical protein MGC2463 (MGC2463), mRNA                                |
| NM_024069 | Homo sapiens hypothetical protein MGC2749 (MGC2749), mRNA                                |



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| NM_024068 | Homo sapiens hypothetical protein MGC2731 (MGC2731), mRNA  |
| NM_024065 | Homo sapiens hypothetical protein MGC3062 (MGC3062), mRNA  |
| NM_024061 | Homo sapiens hypothetical protein MGC5521 (MGC5521), mRNA  |
| NM_024058 | Homo sapiens hypothetical protein MGC5590 (MGC5590), mRNA  |
| NM_024057 | Homo sapiens hypothetical protein MGC5585 (MGC5585), mRNA  |
| NM_024053 | Homo sapiens hypothetical protein MGC861 (MGC861), mRNA  |
| NM_024050 | Homo sapiens hypothetical protein MGC2594 (MGC2594), mRNA  |
| NM_024049 | Homo sapiens hypothetical protein MGC5566 (MGC5566), mRNA  |
| NM_024048 | Homo sapiens hypothetical protein MGC3020 (MGC3020), mRNA  |
| NM_024046 | Homo sapiens hypothetical protein MGC8407 (MGC8407), mRNA  |
| NM_024045 | Homo sapiens nucleolar protein GU2 (GU2), mRNA   |
| NM_024041 | Homo sapiens hypothetical protein MGC3180 (MGC3180), mRNA  |
| NM_024039 | Homo sapiens hypothetical protein MGC2488 (MGC2488), mRNA  |
| NM_024038 | Homo sapiens hypothetical protein MGC2803 (MGC2803), mRNA  |
| NM_024037 | Homo sapiens hypothetical protein MGC2603 (MGC2603), mRNA  |
| NM_024032 | Homo sapiens hypothetical protein MGC3130 (MGC3130), mRNA  |
| NM_024031 | Homo sapiens hypothetical protein MGC3121 (MGC3121), mRNA  |
| NM_024028 | Homo sapiens hypothetical protein MGC3265 (MGC3265), mRNA  |
| NM_024027 | Homo sapiens hypothetical protein MGC3279 similar to collectins (MGC3279), mRNA                                |
| NM_024025 | Homo sapiens hypothetical protein MGC1136 (MGC1136), mRNA  |
| NM_024006 | Homo sapiens hypothetical protein IMAGE3455200 (IMAGE3455200), mRNA  |
| NM_015653 | Homo sapiens DKFZP566F0546 protein (DKFZP566F0546), mRNA   |
| NM_015147 | Homo sapiens KIAA0582 protein (KIAA0582), mRNA   |
| NM_016481 | Homo sapiens hypothetical protein (HSPC219), mRNA  |
| NM_023940 | Homo sapiens hypothetical protein MGC2827 (MGC2827), mRNA  |
| NM_023938 | Homo sapiens hypothetical protein MGC2742 (MGC2742), mRNA  |
| NM_023931 | Homo sapiens hypothetical protein MGC2474 (MGC2474), mRNA  |
| NM_015517 | Homo sapiens MBD2 (methyl-CpG-binding protein)-interacting zinc finger protein (MIZF), mRNA                    |
| NM_015540 | Homo sapiens DKFZP727M111 protein (DKFZP727M111), mRNA   |
| NM_015043 | Homo sapiens KIAA0676 protein (KIAA0676), mRNA   |
| NM_023934 | Homo sapiens hypothetical protein MGC2495 (MGC2495), mRNA  |
| NM_023928 | Homo sapiens hypothetical protein FLJ12389 similar to acetoacetyl-CoA synthetase (FLJ12389), mRNA              |
| NM_023926 | Homo sapiens hypothetical protein FLJ12895 (FLJ12895), mRNA  |
| NM_023924 | Homo sapiens hypothetical protein FLJ13441 (FLJ13441), mRNA  |
| NM_020239 | Homo sapiens small protein effector 1 of Cdc42 (SPEC1), mRNA   |
| NM_012069 | Homo sapiens ATPase, (Na <sup>+</sup> )/K <sup>+</sup> transporting, beta 4 polypeptide (ATP1B4), mRNA         |
| NM_023112 | Homo sapiens hypothetical protein FLJ21916 (FLJ21916), mRNA  |
| NM_015324 | Homo sapiens KIAA0409 protein (KIAA0409), mRNA   |
| NM_023079 | Homo sapiens hypothetical protein FLJ13855 (FLJ13855), mRNA  |
| NM_023077 | Homo sapiens hypothetical protein FLJ12439 (FLJ12439), mRNA  |
| NM_023075 | Homo sapiens hypothetical protein FLJ11585 (FLJ11585), mRNA  |
| NM_023074 | Homo sapiens hypothetical protein FLJ12644 (FLJ12644), mRNA  |
| NM_023073 | Homo sapiens hypothetical protein FLJ13231 (FLJ13231), mRNA  |
| NM_023071 | Homo sapiens hypothetical protein FLJ13117 (FLJ13117), mRNA  |
| NM_012319 | Homo sapiens LIV-1 protein, estrogen regulated (LIV-1), mRNA   |
| NM_023012 | Homo sapiens hypothetical protein FLJ11021 similar to splicing factor, arginine/serine-rich 4 (FLJ11021), mRNA |
| NM_023008 | Homo sapiens hypothetical protein FLJ12949 (FLJ12949), mRNA  |

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| NM_023007 | Homo sapiens hypothetical protein FLJ12517 (FLJ12517), mRNA                                 |
| NM_022918 | Homo sapiens hypothetical protein FLJ22104 (FLJ22104), mRNA                                 |
| NM_022914 | Homo sapiens hypothetical protein 24432 (24432), mRNA                                       |
| NM_022912 | Homo sapiens hypothetical protein FLJ13110 (FLJ13110), mRNA                                 |
| NM_022907 | Homo sapiens hypothetical protein FLJ23053 (FLJ23053), mRNA                                 |
| NM_022905 | Homo sapiens hypothetical protein FLJ12572 (FLJ12572), mRNA                                 |
| NM_022901 | Homo sapiens hypothetical protein FLJ21302 (FLJ21302), mRNA                                 |
| NM_022898 | Homo sapiens B-cell CLL/lymphoma 11B (zinc finger protein) (BCL11B), mRNA                   |
| NM_022841 | Homo sapiens hypothetical protein FLJ12994 (FLJ12994), mRNA                                 |
| NM_022840 | Homo sapiens hypothetical protein FLJ23017 (FLJ23017), mRNA                                 |
| NM_022834 | Homo sapiens hypothetical protein FLJ22215 (FLJ22215), mRNA                                 |
| NM_022832 | Homo sapiens hypothetical protein FLJ12552 (FLJ12552), mRNA                                 |
| NM_022827 | Homo sapiens hypothetical protein FLJ21347 (FLJ21347), mRNA                                 |
| NM_022826 | Homo sapiens axotrophin (AXOT), mRNA  |
| NM_022823 | Homo sapiens hypothetical protein FLJ22362 (FLJ22362), mRNA                                 |
| NM_022781 | Homo sapiens hypothetical protein FLJ21343 (FLJ21343), mRNA                                 |
| NM_022780 | Homo sapiens hypothetical protein FLJ13910 (FLJ13910), mRNA                                 |
| NM_022778 | Homo sapiens hypothetical protein DKFZp434L0117 (DKFZP434L0117), mRNA                       |
| NM_022777 | Homo sapiens hypothetical protein FLJ14117 (FLJ14117), mRNA                                 |
| NM_022771 | Homo sapiens hypothetical protein FLJ12085 (FLJ12085), mRNA                                 |
| NM_022770 | Homo sapiens hypothetical protein FLJ13912 (FLJ13912), mRNA                                 |
| NM_022769 | Homo sapiens hypothetical protein FLJ21868 (FLJ21868), mRNA                                 |
| NM_022767 | Homo sapiens hypothetical protein FLJ12484 (FLJ12484), mRNA                                 |
| NM_022766 | Homo sapiens hypothetical protein FLJ23239 (FLJ23239), mRNA                                 |
| NM_022763 | Homo sapiens hypothetical protein FLJ23399 (FLJ23399), mRNA                                 |
| NM_022762 | Homo sapiens hypothetical protein FLJ22318 (FLJ22318), mRNA                                 |
| NM_022759 | Homo sapiens hypothetical protein FLJ21865 (FLJ21865), mRNA                                 |
| NM_022754 | Homo sapiens hypothetical protein FLJ12876 (FLJ12876), mRNA                                 |
| NM_022752 | Homo sapiens hypothetical protein FLJ22059 (FLJ22059), mRNA                                 |
| NM_022751 | Homo sapiens hypothetical protein FLJ21610 (FLJ21610), mRNA                                 |
| NM_022750 | Homo sapiens hypothetical protein FLJ22693 (FLJ22693), mRNA                                 |
| NM_022747 | Homo sapiens hypothetical protein FLJ22558 (FLJ22558), mRNA                                 |
| NM_022744 | Homo sapiens hypothetical protein FLJ13868 (FLJ13868), mRNA                                 |
| NM_022743 | Homo sapiens hypothetical protein FLJ21080 (FLJ21080), mRNA                                 |
| NM_022741 | Homo sapiens hypothetical protein FLJ11850 (FLJ11850), mRNA                                 |
| NM_022736 | Homo sapiens hypothetical protein FLJ14153 (FLJ14153), mRNA                                 |
| NM_022734 | Homo sapiens hypothetical protein FLJ20859 (FLJ20859), mRNA                                 |
| NM_022731 | Homo sapiens similar to rat nuclear ubiquitous casein kinase 2 (NUCKS), mRNA                |
| NM_022727 | Homo sapiens HpaII tiny fragments locus 9C (HTF9C), mRNA                                    |
| NM_012197 | Homo sapiens rab6 GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA |
| NM_015136 | Homo sapiens KIAA0246 protein (stab1), mRNA   |
| NM_022659 | Homo sapiens likely ortholog of mouse early B-cell factor 2 (FLJ11500), mRNA                |
| NM_022571 | Homo sapiens putative leukocyte platelet-activating factor receptor (HUMNP11Y20), mRNA      |
| NM_021024 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 17-like 1 (HMG17L1), mRNA |
| NM_019884 | Homo sapiens glycogen synthase kinase 3 alpha (GSK3A), mRNA                                 |
| NM_021034 | Homo sapiens interferon induced transmembrane protein 3 (1-8U) (IFITM3), mRNA               |

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|           | mRNA  |
| NM_022445 | Homo sapiens thiamin pyrophosphokinase 1 (TPK1), mRNA   |
| NM_022495 | Homo sapiens hypothetical protein FLJ12799 (FLJ12799), mRNA   |
| NM_022494 | Homo sapiens hypothetical protein FLJ21952 (FLJ21952), mRNA   |
| NM_022492 | Homo sapiens hypothetical protein FLJ12788 (FLJ12788), mRNA   |
| NM_022488 | Homo sapiens PC3-96 protein (PC3-96), mRNA  |
| NM_022480 | Homo sapiens hypothetical protein FLJ12587 (FLJ12587), mRNA   |
| NM_022474 | Homo sapiens hypothetical protein FLJ12615 similar to membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 5) (FLJ12615), mRNA |
| NM_022455 | Homo sapiens androgen receptor-associated coregulator 267 (ARA267), mRNA  |
| NM_022452 | Homo sapiens hypothetical protein FLJ11618 (FLJ11618), mRNA   |
| NM_022448 | Homo sapiens hypothetical protein FLJ21817 similar to Rhoip2 (FLJ21817), mRNA   |
| NM_022373 | Homo sapiens hypothetical protein FLJ22313 (FLJ22313), mRNA   |
| NM_022370 | Homo sapiens hypothetical protein FLJ21044 similar to Rbig1 (FLJ21044), mRNA  |
| NM_022368 | Homo sapiens praja 1 (PJA1), mRNA   |
| NM_022366 | Homo sapiens hypothetical protein FLJ23182 (FLJ23182), mRNA   |
| NM_022361 | Homo sapiens popeye protein 3 (POP3), mRNA  |
| NM_022360 | Homo sapiens human epididymis-specific 3 beta (HE3-BETA), mRNA  |
| NM_022342 | Homo sapiens kinesin family member 9 (KIF9), mRNA   |
| NM_022372 | Homo sapiens G protein beta subunit-like (GBL), mRNA  |
| NM_022158 | Homo sapiens fructosamine-3-kinase (FN3K), mRNA   |
| NM_022137 | Homo sapiens secreted modular calcium-binding protein 1 (SMOC1), mRNA   |
| NM_022118 | Homo sapiens cutaneous T-cell lymphoma tumor antigen se70-2 (SE70-2), mRNA  |
| NM_022116 | Homo sapiens fidgetin-like 1 (FIGNL1), mRNA   |
| NM_022103 | Homo sapiens hypothetical zinc finger protein FLJ14011 (FLJ14011), mRNA   |
| NM_022070 | Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA   |
| NM_022065 | Homo sapiens hypothetical protein FLJ21877 (FLJ21877), mRNA   |
| NM_021970 | Homo sapiens mitogen-activated protein kinase kinase 1 interacting protein 1 (MAP2K1IP1), mRNA  |
| NM_019081 | Homo sapiens KIAA0430 gene product (KIAA0430), mRNA   |
| NM_021981 | Homo sapiens pre-T/NK cell associated protein (ID12A), mRNA   |
| NM_020121 | Homo sapiens UDP-glucose ceramide glucosyltransferase-like 2 (UGCGL2), mRNA   |
| NM_006683 | Homo sapiens human epididymis-specific 3 alpha (HE3-ALPHA), mRNA  |
| NM_006077 | Homo sapiens calcium binding atopy-related autoantigen 1 (CBARA1), mRNA   |
| NM_021934 | Homo sapiens hypothetical protein FLJ11773 (FLJ11773), mRNA   |
| NM_021933 | Homo sapiens hypothetical protein FLJ12438 (FLJ12438), mRNA   |
| NM_021930 | Homo sapiens Rad50-interacting protein 1 (FLJ11785), mRNA   |
| NM_021929 | Homo sapiens hypothetical protein FLJ21613 similar to rat corneal wound healing related protein (FLJ21613), mRNA                        |
| NM_007272 | Homo sapiens chymotrypsin C (caldecrin) (CTRC), mRNA  |
| NM_004237 | Homo sapiens thyroid hormone receptor interactor 13 (TRIP13), mRNA  |
| NM_003849 | Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA  |
| NM_021648 | Homo sapiens KIAA0721 protein (KIAA0721), mRNA  |
| NM_021831 | Homo sapiens hypothetical protein FLJ21839 (FLJ21839), mRNA   |
| NM_021827 | Homo sapiens hypothetical protein FLJ23514 (FLJ23514), mRNA   |
| NM_021195 | Homo sapiens claudin 6 (CLDN6), mRNA  |
| NM_018947 | Homo sapiens cytochrome c (HCS), mRNA   |

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| NM_021732 | Homo sapiens hypothetical protein PP5395 (PP5395), mRNA   |
| NM_021730 | Homo sapiens hypothetical protein PP1044 (PP1044), mRNA   |
| NM_021643 | Homo sapiens GS3955 protein (GS3955), mRNA  |
| NM_015180 | Homo sapiens synaptic nuclei expressed gene 2 (SYNE-2), mRNA  |
| NM_021633 | Homo sapiens kelch-like protein C3IP1 (C3IP1), mRNA   |
| NM_021629 | Homo sapiens guanine nucleotide binding protein beta subunit 4 (GNB4), mRNA   |
| NM_021627 | Homo sapiens sentrin-specific protease (SENP2), mRNA  |
| NM_021626 | Homo sapiens likely homolog of rat and mouse retinoid-inducible serine carboxypeptidase (RISC), mRNA                      |
| NM_021622 | Homo sapiens pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 1 (PLEKHA1), mRNA |
| NM_012408 | Homo sapiens protein kinase C binding protein 1 (PRKCBP1), mRNA   |
| NM_021252 | Homo sapiens RAB18, member RAS oncogene family (RAB18), mRNA  |
| NM_020806 | Homo sapiens gephyrin (GPHN), mRNA  |
| NM_021258 | Homo sapiens interleukin 22 receptor (IL22R), mRNA  |
| NM_021235 | Homo sapiens epidermal growth factor receptor substrate EPS15R (EPS15R), mRNA   |
| NM_021204 | Homo sapiens E-1 enzyme (MASA), mRNA  |
| NM_021191 | Homo sapiens neurogenic differentiation 4 (NEUROD4), mRNA   |
| NM_021178 | Homo sapiens enhancer of invasion 10 (HEI10), mRNA  |
| NM_021127 | Homo sapiens phorbol-12-myristate-13-acetate-induced protein 1 (PMAIP1), mRNA   |
| NM_021114 | Homo sapiens serine protease inhibitor, Kazal type, 2 (acrosin-trypsin inhibitor) (SPINK2), mRNA                          |
| NM_021103 | Homo sapiens thymosin, beta 10 (TMSB10), mRNA   |
| NM_006435 | Homo sapiens interferon induced transmembrane protein 2 (1-8D) (IFITM2), mRNA   |
| NM_021073 | Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA  |
| NM_003142 | Homo sapiens Sjogren syndrome antigen B (autoantigen La) (SSB), mRNA  |
| NM_003888 | Homo sapiens aldehyde dehydrogenase 1 family, member A2 (ALDH1A2), mRNA   |
| NM_013234 | Homo sapiens muscle specific gene (M9), mRNA  |
| NM_021067 | Homo sapiens KIAA0186 gene product (KIAA0186), mRNA   |
| NM_021020 | Homo sapiens leucine zipper, putative tumor suppressor 1 (LZTS1), mRNA  |
| NM_021025 | Homo sapiens homeo box 11-like 2 (HOX11L2), mRNA  |
| NM_021003 | Homo sapiens protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform (PPM1A), mRNA                       |
| NM_020674 | Homo sapiens cytochrome P450 monooxygenase (CYP-M), mRNA  |
| NM_019612 | Homo sapiens hypothetical protein R30953_1 (R30953_1), mRNA   |
| NM_020904 | Homo sapiens pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 4 (PLEKHA4), mRNA |
| NM_020686 | Homo sapiens NPD009 protein (NPD009), mRNA  |
| NM_020684 | Homo sapiens NPD007 protein (NPD007), mRNA  |
| NM_020683 | Homo sapiens AD026 protein (AD026), mRNA  |
| NM_020679 | Homo sapiens AD023 protein (AD023), mRNA  |
| NM_020677 | Homo sapiens HSCARG protein (HSCARG), mRNA  |
| NM_020675 | Homo sapiens AD024 protein (AD024), mRNA  |
| NM_020673 | Homo sapiens RAB22A, member RAS oncogene family (RAB22A), mRNA  |
| NM_020660 | Homo sapiens connexin-36 (CX36), mRNA   |
| NM_019108 | Homo sapiens hypothetical protein FLJ12886 (FLJ12886), mRNA   |
| NM_018838 | Homo sapiens 13kDa differentiation-associated protein (DAP13), mRNA   |

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| NM_018434 | Homo sapiens goliath protein (GP), mRNA   |
| NM_020437 | Homo sapiens similar to aspartate beta hydroxylase (ASPH) (LOC57168), mRNA                                  |
| NM_020524 | Homo sapiens hematopoietic PBX-interacting protein (HPIP), mRNA   |
| NM_018638 | Homo sapiens ethanolamine kinase (EK11), mRNA   |
| NM_016326 | Homo sapiens chemokine-like factor 1 (CKLF1), mRNA  |
| NM_016951 | Homo sapiens chemokine-like factor 1 (CKLF1), mRNA  |
| NM_020143 | Homo sapiens putative 28 kDa protein (LOC56902), mRNA   |
| NM_020141 | Homo sapiens protein x 013 (AD-020), mRNA   |
| NM_020122 | Homo sapiens potassium channel modulatory factor (PCMF), mRNA   |
| NM_018843 | Homo sapiens mitochondrial carrier family protein (MCFP), mRNA  |
| NM_018840 | Homo sapiens putative Rab5-interacting protein (RIP5), mRNA   |
| NM_016303 | Homo sapiens pp21 homolog (LOC51186), mRNA  |
| NM_016300 | Homo sapiens cyclic AMP-regulated phosphoprotein, 21 kD (ARPP-21), mRNA                                     |
| NM_016299 | Homo sapiens likely ortholog of mouse heat shock protein, 70 kDa 4 (LOC51182), mRNA                         |
| NM_013259 | Homo sapiens neuronal protein (NP25), mRNA  |
| NM_005064 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 23 (SCYA23), mRNA                       |
| NM_013260 | Homo sapiens transcriptional regulator protein (HCNGP), mRNA  |
| NM_020433 | Homo sapiens hypothetical protein LOC57158 (LOC57158), mRNA   |
| NM_020410 | Homo sapiens CGI-152 protein (CGI-152), mRNA  |
| NM_020401 | Homo sapiens nuclear pore complex protein (NUP107), mRNA  |
| NM_020400 | Homo sapiens G protein-coupled receptor 92 (GPR92), mRNA  |
| NM_020397 | Homo sapiens CamKI-like protein kinase (LOC57118), mRNA   |
| NM_020388 | Homo sapiens CATX-15 protein (CATX-15), mRNA  |
| NM_020386 | Homo sapiens HRAS-like suppressor (HRASLS), mRNA  |
| NM_020361 | Homo sapiens carboxypeptidase B precursor (CPAH), mRNA  |
| NM_020357 | Homo sapiens PEST-containing nuclear protein (pcnp), mRNA   |
| NM_020345 | Homo sapiens I-kappa-B-interacting Ras-like protein 1 (KBRAS1), mRNA  |
| NM_020360 | Homo sapiens phospholipid scramblase 3 (PLSCR3), mRNA   |
| NM_020348 | Homo sapiens cyclin M1 (CNNM1), mRNA  |
| NM_000888 | Homo sapiens integrin, beta 6 (ITGB6), mRNA   |
| NM_020181 | Homo sapiens myelin proteolipid protein-like protein (PLPL), mRNA   |
| NM_020144 | Homo sapiens poly(A) polymerase beta (testis specific) (PAPOLB), mRNA                                       |
| NM_020202 | Homo sapiens Nit protein 2 (NIT2), mRNA   |
| NM_020250 | Homo sapiens MOST2 protein (MOST2), mRNA  |
| NM_020237 | Homo sapiens MOST-1 protein (MOST-1), mRNA  |
| NM_020234 | Homo sapiens x 009 protein (MDS009), mRNA   |
| NM_020128 | Homo sapiens nuclear protein double minute 1 (MDM1), mRNA   |
| NM_020169 | Homo sapiens latexin protein (LXN), mRNA  |
| NM_020133 | Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta), mRNA                                |
| NM_020241 | Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B (SEMA6B), mRNA |
| NM_020163 | Homo sapiens semaphorin sem2 (LOC56920), mRNA   |
| NM_020199 | Homo sapiens HTGN29 protein (HTGN29), mRNA  |
| NM_020197 | Homo sapiens HSKM-B protein (HSKM-B), mRNA  |
| NM_020200 | Homo sapiens HHGP protein (HHGP), mRNA  |
| NM_020195 | Homo sapiens HCDI protein (HCDI), mRNA  |
| NM_020198 | Homo sapiens GK001 protein (GK001), mRNA  |
| NM_020117 | Homo sapiens hypothetical protein FLJ10595 (FLJ10595), mRNA   |

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| NM_020119 | Homo sapiens hypothetical protein FLB6421 (FLB6421), mRNA   |
| NM_020162 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 33 (DDX33), mRNA  |
| NM_020215 | Homo sapiens hypothetical protein DKFZp761F2014 (DKFZp761F2014), mRNA   |
| NM_020221 | Homo sapiens hypothetical protein DKFZp547I224 (DKFZp547I224), mRNA   |
| NM_020217 | Homo sapiens hypothetical protein DKFZp547I014 (DKFZp547I014), mRNA   |
| NM_020161 | Homo sapiens hypothetical protein DKFZp547H025 (DKFZp547H025), mRNA   |
| NM_020186 | Homo sapiens DC11 protein (DC11), mRNA  |
| NM_020205 | Homo sapiens cellular zinc finger anti-NF-kappaB Cezanne (CEZANNE), mRNA  |
| NM_019887 | Homo sapiens second mitochondria-derived activator of caspase (SMAC), mRNA  |
| NM_019892 | Homo sapiens phosphatidylinositol (4,5) biphosphate 5-phosphatase homolog; phosphatidylinositol polyphosphate 5-phosphatase type IV (PPI5PIV), mRNA |
| NM_019885 | Homo sapiens cytochrome P450 retinoid metabolizing protein (P450RAI-2), mRNA  |
| NM_019845 | Homo sapiens candidate mediator of the p53-dependent G2 arrest (REPRIMO), mRNA  |
| NM_019853 | Homo sapiens protein phosphatase 4 regulatory subunit 2 (PPP4R2), mRNA  |
| NM_013301 | Homo sapiens protein predicted by clone 23882 (HSU79303), mRNA  |
| NM_013300 | Homo sapiens protein predicted by clone 23733 (HSU79274), mRNA  |
| NM_013296 | Homo sapiens LGN protein (HSU54999), mRNA   |
| NM_013293 | Homo sapiens transformer-2 alpha (htra-2 alpha) (HSU53209), mRNA  |
| NM_013310 | Homo sapiens hypothetical protein (AF038169), mRNA  |
| NM_018975 | Homo sapiens TRF2-interacting telomeric RAP1 protein (RAP1), mRNA   |
| NM_019082 | Homo sapiens putative nucleolar RNA helicase (NOH61), mRNA  |
| NM_019020 | Homo sapiens hypothetical protein (FLJ20748), mRNA  |
| NM_019058 | Homo sapiens HIF-1 responsive RTP801 (FLJ20500), mRNA   |
| NM_019056 | Homo sapiens neuronal protein 17.3 (P17.3), mRNA  |
| NM_019042 | Homo sapiens hypothetical protein (FLJ20485), mRNA  |
| NM_019061 | Homo sapiens phosphatidylinositol-3 phosphate 3-phosphatase adaptor subunit (3-PAP), mRNA   |
| NM_018986 | Homo sapiens hypothetical protein (FLJ20356), mRNA  |
| NM_019034 | Homo sapiens ras homolog gene family, member F (in filopodia) (ARHF), mRNA  |
| NM_019062 | Homo sapiens hypothetical protein (FLJ20225), mRNA  |
| NM_019038 | Homo sapiens hypothetical protein (FLJ11045), mRNA  |
| NM_019044 | Homo sapiens hypothetical protein (FLJ10996), mRNA  |
| NM_018180 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 32 (DDX32), mRNA  |
| NM_019028 | Homo sapiens hypothetical protein similar to ankyrin repeat-containing priotein AKR1 (FLJ10852), mRNA   |
| NM_019014 | Homo sapiens similar to DNA-directed RNA polymerase I (135 kDa) (Rpo1-2), mRNA  |
| NM_019023 | Homo sapiens hypothetical protein (FLJ10640), mRNA  |
| NM_018162 | Homo sapiens hypothetical protein FLJ10633 (FLJ10633), mRNA   |
| NM_019067 | Homo sapiens hypothetical protein (FLJ10613), mRNA  |
| NM_019057 | Homo sapiens hypothetical protein (FLJ10404), mRNA  |
| NM_018846 | Homo sapiens SBB126 protein (SBB126), mRNA  |
| NM_016483 | Homo sapiens hypothetical protein (HSPC226), mRNA   |
| NM_018400 | Homo sapiens voltage-gated sodium channel beta-3 subunit (scn3b gene)   |

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|           | (HSA243396), mRNA  |
| NM_018700 | Homo sapiens tripartite motif-containing 36 (TRIM36), mRNA   |
| NM_018547 | Homo sapiens hypothetical protein PRO2964 (PRO2964), mRNA  |
| NM_018546 | Homo sapiens hypothetical protein PRO2958 (PRO2958), mRNA  |
| NM_018544 | Homo sapiens hypothetical protein PRO2949 (PRO2949), mRNA  |
| NM_018634 | Homo sapiens hypothetical protein PRO2893 (PRO2893), mRNA  |
| NM_018543 | Homo sapiens hypothetical protein PRO2859 (PRO2859), mRNA  |
| NM_018542 | Homo sapiens hypothetical protein PRO2834 (PRO2834), mRNA  |
| NM_018538 | Homo sapiens erythroblast membrane-associated protein (ERMAP), mRNA  |
| NM_018534 | Homo sapiens hypothetical protein PRO2714 (PRO2714), mRNA  |
| NM_018530 | Homo sapiens hypothetical protein PRO2521 (PRO2521), mRNA  |
| NM_018627 | Homo sapiens hypothetical protein PRO2405 (PRO2405), mRNA  |
| NM_018523 | Homo sapiens hypothetical protein PRO2325 (PRO2325), mRNA  |
| NM_018519 | Homo sapiens hypothetical protein PRO2266 (PRO2266), mRNA  |
| NM_018517 | Homo sapiens hypothetical protein PRO2214 (PRO2214), mRNA  |
| NM_018621 | Homo sapiens hypothetical protein PRO2198 (PRO2198), mRNA  |
| NM_018619 | Homo sapiens hypothetical protein PRO2133 (PRO2133), mRNA  |
| NM_018618 | Homo sapiens hypothetical protein PRO2121 (PRO2121), mRNA  |
| NM_018616 | Homo sapiens hypothetical protein PRO2037 (PRO2037), mRNA  |
| NM_018512 | Homo sapiens hypothetical protein PRO2015 (PRO2015), mRNA  |
| NM_018610 | Homo sapiens hypothetical protein PRO1942 (PRO1942), mRNA  |
| NM_018510 | Homo sapiens hypothetical protein PRO1866 (PRO1866), mRNA  |
| NM_018507 | Homo sapiens hypothetical protein PRO1843 (PRO1843), mRNA  |
| NM_018606 | Homo sapiens hypothetical protein PRO1787 (PRO1787), mRNA  |
| NM_018589 | Homo sapiens hypothetical protein PRO1635 (PRO1635), mRNA  |
| NM_018587 | Homo sapiens hypothetical protein PRO1617 (PRO1617), mRNA  |
| NM_018503 | Homo sapiens hypothetical protein PRO1598 (PRO1598), mRNA  |
| NM_018586 | Homo sapiens hypothetical protein PRO1584 (PRO1584), mRNA  |
| NM_018502 | Homo sapiens hypothetical protein PRO1580 (PRO1580), mRNA  |
| NM_018603 | Homo sapiens hypothetical protein PRO1496 (PRO1496), mRNA  |
| NM_018584 | Homo sapiens hypothetical protein PRO1489 (PRO1489), mRNA  |
| NM_018582 | Homo sapiens hypothetical protein PRO1483 (PRO1483), mRNA  |
| NM_018602 | Homo sapiens DnaJ (Hsp40) homolog, subfamily A, member 4 (DNAJA4), mRNA                                      |
| NM_018578 | Homo sapiens hypothetical protein PRO1257 (PRO1257), mRNA  |
| NM_018576 | Homo sapiens hypothetical protein PRO1163 (PRO1163), mRNA  |
| NM_018497 | Homo sapiens hypothetical protein PRO1048 (PRO1048), mRNA  |
| NM_018565 | Homo sapiens hypothetical protein PRO0899 (PRO0899), mRNA  |
| NM_018562 | Homo sapiens hypothetical protein PRO0386 (PRO0386), mRNA  |
| NM_018590 | Homo sapiens hypothetical protein PRO0082 (PRO0082), mRNA  |
| NM_018667 | Homo sapiens sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II) (SMPD3), mRNA |
| NM_017544 | Homo sapiens transcription factor NRF (NRF), mRNA  |
| NM_018468 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS033 (MDS033), mRNA               |
| NM_018467 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS032 (MDS032), mRNA               |
| NM_018464 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS029 (MDS029), mRNA               |
| NM_018688 | Homo sapiens bridging integrator 3 (BIN3), mRNA  |
| NM_018686 | Homo sapiens CMP-N-acetylneuraminic acid synthase (CMAS), mRNA   |
| NM_018446 | Homo sapiens glycosyltransferase AD-017 (AD-017), mRNA   |



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| NM_018416 | Homo sapiens FOXJ2 forkhead factor (FHX), mRNA                              |
| NM_018407 | Homo sapiens putative integral membrane transporter (LC27), mRNA            |
| NM_018472 | Homo sapiens uncharacterized hypothalamus protein HT011 (HT011), mRNA       |
| NM_018471 | Homo sapiens uncharacterized hypothalamus protein HT010 (HT010), mRNA       |
| NM_018470 | Homo sapiens uncharacterized hypothalamus protein HT009 (HT009), mRNA       |
| NM_018469 | Homo sapiens uncharacterized hypothalamus protein HT008 (HT008), mRNA       |
| NM_017523 | Homo sapiens XIAP associated factor-1 (HSXIAPAF1), mRNA                     |
| NM_017514 | Homo sapiens SEX gene (HSSEXGENE), mRNA                                     |
| NM_017512 | Homo sapiens rTS beta protein (HSRTSBETA), mRNA                             |
| NM_016536 | Homo sapiens HSPC059 protein (HSPC059), mRNA                                |
| NM_018553 | Homo sapiens ELG protein (HSA277841), mRNA                                  |
| NM_018403 | Homo sapiens transcription factor (SMIF gene) (HSA275986), mRNA             |
| NM_018404 | Homo sapiens centaurin, alpha 2 (CENTA2), mRNA                              |
| NM_018401 | Homo sapiens gene for serine/threonine protein kinase (HSA250839), mRNA     |
| NM_017582 | Homo sapiens NICE-5 protein (HSA243666), mRNA                               |
| NM_018684 | Homo sapiens hepatocellular carcinoma-associated antigen 127 (HCA127), mRNA |
| NM_018477 | Homo sapiens uncharacterized hypothalamus protein HARP11 (HARP11), mRNA     |
| NM_018652 | Homo sapiens golgin-like protein (GLP), mRNA                                |
| NM_017962 | Homo sapiens hypothetical protein FLJ20825 (FLJ20825), mRNA                 |
| NM_017961 | Homo sapiens hypothetical protein FLJ20813 (FLJ20813), mRNA                 |
| NM_017960 | Homo sapiens hypothetical protein FLJ20808 (FLJ20808), mRNA                 |
| NM_017959 | Homo sapiens hypothetical protein FLJ20802 (FLJ20802), mRNA                 |
| NM_017958 | Homo sapiens hypothetical protein FLJ20783 (FLJ20783), mRNA                 |
| NM_017957 | Homo sapiens epsin 3 (FLJ20778), mRNA                                       |
| NM_017956 | Homo sapiens hypothetical protein FLJ20772 (FLJ20772), mRNA                 |
| NM_017950 | Homo sapiens hypothetical protein FLJ20753 (FLJ20753), mRNA                 |
| NM_017949 | Homo sapiens hypothetical protein FLJ20739 (FLJ20739), mRNA                 |
| NM_017946 | Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA                 |
| NM_017953 | Homo sapiens hypothetical protein FLJ20729 (FLJ20729), mRNA                 |
| NM_017943 | Homo sapiens hypothetical protein FLJ20725 (FLJ20725), mRNA                 |
| NM_017941 | Homo sapiens hypothetical protein FLJ20721 (FLJ20721), mRNA                 |
| NM_017938 | Homo sapiens hypothetical protein FLJ20716 (FLJ20716), mRNA                 |
| NM_017937 | Homo sapiens hypothetical protein FLJ20712 (FLJ20712), mRNA                 |
| NM_017932 | Homo sapiens hypothetical protein FLJ20700 (FLJ20700), mRNA                 |
| NM_017929 | Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA                 |
| NM_017928 | Homo sapiens hypothetical protein FLJ20694 (FLJ20694), mRNA                 |
| NM_017925 | Homo sapiens hypothetical protein FLJ20686 (FLJ20686), mRNA                 |
| NM_017920 | Homo sapiens hypothetical protein FLJ20654 (FLJ20654), mRNA                 |
| NM_017919 | Homo sapiens hypothetical protein FLJ20651 (FLJ20651), mRNA                 |
| NM_017918 | Homo sapiens hypothetical protein FLJ20647 (FLJ20647), mRNA                 |
| NM_017917 | Homo sapiens hypothetical protein FLJ20644 (FLJ20644), mRNA                 |
| NM_017916 | Homo sapiens hypothetical protein FLJ20643 (FLJ20643), mRNA                 |
| NM_017915 | Homo sapiens hypothetical protein FLJ20641 (FLJ20641), mRNA                 |
| NM_017912 | Homo sapiens hypothetical protein FLJ20637 (FLJ20637), mRNA                 |
| NM_017909 | Homo sapiens hypothetical protein FLJ20627 (FLJ20627), mRNA                 |
| NM_017907 | Homo sapiens hypothetical protein FLJ20625 (FLJ20625), mRNA                 |
| NM_017903 | Homo sapiens hypothetical protein FLJ20618 (FLJ20618), mRNA                 |
| NM_017901 | Homo sapiens two-pore channel 1, homolog (KIAA1169), mRNA                   |
| NM_017900 | Homo sapiens hypothetical protein FLJ20608 (FLJ20608), mRNA                 |
| NM_017899 | Homo sapiens hypothetical protein FLJ20607 (TSC), mRNA                      |



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| NM_017897 | Homo sapiens hypothetical protein FLJ20604 (FLJ20604), mRNA  |
| NM_017894 | Homo sapiens hypothetical protein FLJ20595 (FLJ20595), mRNA  |
| NM_017893 | Homo sapiens sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G (SEMA4G), mRNA |
| NM_017891 | Homo sapiens hypothetical protein FLJ20584 (FLJ20584), mRNA  |
| NM_017885 | Homo sapiens hypothetical protein FLJ20568 (FLJ20568), mRNA  |
| NM_017881 | Homo sapiens hypothetical protein FLJ20559 (FLJ20559), mRNA  |
| NM_017876 | Homo sapiens hypothetical protein FLJ20552 (FLJ20552), mRNA  |
| NM_017873 | Homo sapiens hypothetical protein FLJ20548 (FLJ20548), mRNA  |
| NM_017868 | Homo sapiens hypothetical protein FLJ20535 (FLJ20535), mRNA  |
| NM_017866 | Homo sapiens hypothetical protein FLJ20533 (FLJ20533), mRNA  |
| NM_017863 | Homo sapiens hypothetical protein FLJ20527 (FLJ20527), mRNA  |
| NM_017860 | Homo sapiens hypothetical protein FLJ20519 (FLJ20519), mRNA  |
| NM_017858 | Homo sapiens hypothetical protein FLJ20516 (FLJ20516), mRNA  |
| NM_017856 | Homo sapiens hypothetical protein FLJ20514 (FLJ20514), mRNA  |
| NM_017854 | Homo sapiens hypothetical protein FLJ20512 (FLJ20512), mRNA  |
| NM_017853 | Homo sapiens hypothetical protein FLJ20511 (FLJ20511), mRNA  |
| NM_017851 | Homo sapiens hypothetical protein FLJ20509 (FLJ20509), mRNA  |
| NM_017848 | Homo sapiens hypothetical protein FLJ20506 (FLJ20506), mRNA  |
| NM_017843 | Homo sapiens breast carcinoma amplified sequence 4 (BCAS4), mRNA   |
| NM_017836 | Homo sapiens hypothetical protein FLJ20473 (FLJ20473), mRNA  |
| NM_017834 | Homo sapiens hypothetical protein FLJ20464 (FLJ20464), mRNA  |
| NM_017831 | Homo sapiens hypothetical protein FLJ20456 (FLJ20456), mRNA  |
| NM_017828 | Homo sapiens hypothetical protein FLJ20452 (FLJ20452), mRNA  |
| NM_017825 | Homo sapiens hypothetical protein FLJ20446 (FLJ20446), mRNA  |
| NM_017824 | Homo sapiens hypothetical protein FLJ20445 (FLJ20445), mRNA  |
| NM_017819 | Homo sapiens hypothetical protein FLJ20432 (FLJ20432), mRNA  |
| NM_017817 | Homo sapiens hypothetical protein FLJ20429 (FLJ20429), mRNA  |
| NM_017816 | Homo sapiens hypothetical protein FLJ20425 (FLJ20425), mRNA  |
| NM_017814 | Homo sapiens hypothetical protein FLJ20422 (FLJ20422), mRNA  |
| NM_017813 | Homo sapiens hypothetical protein FLJ20421 (FLJ20421), mRNA  |
| NM_017812 | Homo sapiens hypothetical protein FLJ20420 (FLJ20420), mRNA  |
| NM_017808 | Homo sapiens hypothetical protein FLJ20413 (FLJ20413), mRNA  |
| NM_017805 | Homo sapiens hypothetical protein FLJ20401 (FLJ20401), mRNA  |
| NM_017803 | Homo sapiens hypothetical protein FLJ20399 (FLJ20399), mRNA  |
| NM_017801 | Homo sapiens hypothetical protein FLJ20396 (FLJ20396), mRNA  |
| NM_017799 | Homo sapiens hypothetical protein FLJ20392 (FLJ20392), mRNA  |
| NM_017793 | Homo sapiens hypothetical protein FLJ20374 (FLJ20374), mRNA  |
| NM_017791 | Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA  |
| NM_017787 | Homo sapiens hypothetical protein FLJ20154 (FLJ20154), mRNA  |
| NM_017782 | Homo sapiens hypothetical protein FLJ20360 (FLJ20360), mRNA  |
| NM_017781 | Homo sapiens hypothetical protein FLJ20359 (FLJ20359), mRNA  |
| NM_017779 | Homo sapiens hypothetical protein FLJ20354 (FLJ20354), mRNA  |
| NM_017777 | Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA  |
| NM_017776 | Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA  |
| NM_017773 | Homo sapiens hypothetical protein FLJ20340 (FLJ20340), mRNA  |
| NM_017769 | Homo sapiens hypothetical protein FLJ20333 (FLJ20333), mRNA  |
| NM_017767 | Homo sapiens hypothetical protein FLJ20327 (FLJ20327), mRNA  |
| NM_017766 | Homo sapiens hypothetical protein FLJ20321 (FLJ20321), mRNA  |
| NM_017765 | Homo sapiens hypothetical protein FLJ20320 (FLJ20320), mRNA  |
| NM_017763 | Homo sapiens hypothetical protein FLJ20315 (FLJ20315), mRNA  |

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| NM_017761 | Homo sapiens hypothetical protein FLJ20312 (FLJ20312), mRNA                            |
| NM_017760 | Homo sapiens hypothetical protein FLJ20311 (FLJ20311), mRNA                            |
| NM_017755 | Homo sapiens hypothetical protein FLJ20303 (FLJ20303), mRNA                            |
| NM_017752 | Homo sapiens hypothetical protein FLJ20298 (FLJ20298), mRNA                            |
| NM_017750 | Homo sapiens hypothetical protein FLJ20296 (FLJ20296), mRNA                            |
| NM_017746 | Homo sapiens hypothetical protein FLJ20287 (FLJ20287), mRNA                            |
| NM_017745 | Homo sapiens hypothetical protein FLJ20285 (FLJ20285), mRNA                            |
| NM_017742 | Homo sapiens hypothetical protein FLJ20281 (FLJ20281), mRNA                            |
| NM_017741 | Homo sapiens hypothetical protein FLJ20280 (FLJ20280), mRNA                            |
| NM_017739 | Homo sapiens O-linked mannose beta1,2-N-acetylglucosaminyltransferase (FLJ20277), mRNA |
| NM_017737 | Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA                            |
| NM_017729 | Homo sapiens hypothetical protein FLJ20258 (FLJ20258), mRNA                            |
| NM_017728 | Homo sapiens hypothetical protein FLJ20255 (FLJ20255), mRNA                            |
| NM_017727 | Homo sapiens hypothetical protein FLJ20254 (FLJ20254), mRNA                            |
| NM_017724 | Homo sapiens leucine rich repeat (in FLII) interacting protein 2 (LRRFIP2), mRNA       |
| NM_017721 | Homo sapiens hypothetical protein FLJ20241 (FLJ20241), mRNA                            |
| NM_017713 | Homo sapiens hypothetical protein FLJ20211 (FLJ20211), mRNA                            |
| NM_017712 | Homo sapiens hypothetical protein FLJ20208 (FLJ20208), mRNA                            |
| NM_017710 | Homo sapiens hypothetical protein FLJ20203 (FLJ20203), mRNA                            |
| NM_017708 | Homo sapiens hypothetical protein FLJ20200 (FLJ20200), mRNA                            |
| NM_017707 | Homo sapiens hypothetical protein FLJ20199 (FLJ20199), mRNA                            |
| NM_017706 | Homo sapiens hypothetical protein FLJ20195 (FLJ20195), mRNA                            |
| NM_017705 | Homo sapiens hypothetical protein FLJ20190 (FLJ20190), mRNA                            |
| NM_017703 | Homo sapiens hypothetical protein FLJ20188 (FLJ20188), mRNA                            |
| NM_017702 | Homo sapiens hypothetical protein FLJ20186 (FLJ20186), mRNA                            |
| NM_017700 | Homo sapiens hypothetical protein FLJ20184 (FLJ20184), mRNA                            |
| NM_017696 | Homo sapiens hypothetical protein FLJ20170 (FLJ20170), mRNA                            |
| NM_017694 | Homo sapiens hypothetical protein FLJ20160 (FLJ20160), mRNA                            |
| NM_017693 | Homo sapiens hypothetical protein FLJ20159 (FLJ20159), mRNA                            |
| NM_017691 | Homo sapiens hypothetical protein FLJ20156 (FLJ20156), mRNA                            |
| NM_017689 | Homo sapiens hypothetical protein FLJ20151 (FLJ20151), mRNA                            |
| NM_017688 | Homo sapiens hypothetical protein FLJ20150 (FLJ20150), mRNA                            |
| NM_017685 | Homo sapiens hypothetical protein FLJ20139 (FLJ20139), mRNA                            |
| NM_017684 | Homo sapiens hypothetical protein FLJ20136 (FLJ20136), mRNA                            |
| NM_017682 | Homo sapiens hypothetical protein FLJ20132 (FLJ20132), mRNA                            |
| NM_017681 | Homo sapiens hypothetical protein FLJ20130 (FLJ20130), mRNA                            |
| NM_017679 | Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA                            |
| NM_017674 | Homo sapiens hypothetical protein FLJ20123 (FLJ20123), mRNA                            |
| NM_017664 | Homo sapiens hypothetical protein FLJ20093 (FLJ20093), mRNA                            |
| NM_017661 | Homo sapiens hypothetical protein FLJ20086 (FLJ20086), mRNA                            |
| NM_017660 | Homo sapiens hypothetical protein FLJ20085 (FLJ20085), mRNA                            |
| NM_017658 | Homo sapiens hypothetical protein FLJ20081 (FLJ20081), mRNA                            |
| NM_017656 | Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA                            |
| NM_017655 | Homo sapiens hypothetical protein FLJ20075 (FLJ20075), mRNA                            |
| NM_017654 | Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA                            |
| NM_017653 | Homo sapiens hypothetical protein FLJ20071 (FLJ20071), mRNA                            |
| NM_017651 | Homo sapiens hypothetical protein FLJ20069 (FLJ20069), mRNA                            |
| NM_017650 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 9A (PP1R9A), mRNA   |
| NM_017649 | Homo sapiens cyclin M2 (CNNM2), mRNA   |

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| NM_017644 | Homo sapiens hypothetical protein FLJ20059 (FLJ20059), mRNA                |
| NM_017643 | Homo sapiens hypothetical protein FLJ20055 (FLJ20055), mRNA                |
| NM_017639 | Homo sapiens hypothetical protein FLJ20047 (FLJ20047), mRNA                |
| NM_017638 | Homo sapiens hypothetical protein FLJ20045 (FLJ20045), mRNA                |
| NM_017633 | Homo sapiens hypothetical protein FLJ20037 (FLJ20037), mRNA                |
| NM_017631 | Homo sapiens hypothetical protein FLJ20035 (FLJ20035), mRNA                |
| NM_017630 | Homo sapiens hypothetical protein FLJ20034 (FLJ20034), mRNA                |
| NM_017627 | Homo sapiens hypothetical protein FLJ20030 (FLJ20030), mRNA                |
| NM_017626 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 12 (DNAJB12), mRNA  |
| NM_017621 | Homo sapiens hypothetical protein FLJ20013 (FLJ20013), mRNA                |
| NM_017618 | Homo sapiens hypothetical protein FLJ20006 (FLJ20006), mRNA                |
| NM_017617 | Homo sapiens hypothetical protein FLJ20005 (FLJ20005), mRNA                |
| NM_017615 | Homo sapiens hypothetical protein FLJ20003 (FLJ20003), mRNA                |
| NM_018394 | Homo sapiens hypothetical protein FLJ11342 (FLJ11342), mRNA                |
| NM_018393 | Homo sapiens hypothetical protein FLJ11336 (FLJ11336), mRNA                |
| NM_018391 | Homo sapiens hypothetical protein FLJ11328 (FLJ11328), mRNA                |
| NM_018389 | Homo sapiens GDP-fucose transporter 1 (FLJ11320), mRNA                     |
| NM_018388 | Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA                |
| NM_018386 | Homo sapiens hypothetical protein FLJ11305 (FLJ11305), mRNA                |
| NM_018383 | Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA                |
| NM_018380 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 28 (DDX28), mRNA |
| NM_018379 | Homo sapiens hypothetical protein FLJ11280 (FLJ11280), mRNA                |
| NM_018376 | Homo sapiens hypothetical protein FLJ11275 (FLJ11275), mRNA                |
| NM_018375 | Homo sapiens hypothetical protein FLJ11274 (FLJ11274), mRNA                |
| NM_018374 | Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA                |
| NM_018372 | Homo sapiens hypothetical protein FLJ11269 (FLJ11269), mRNA                |
| NM_018370 | Homo sapiens hypothetical protein FLJ11259 (FLJ11259), mRNA                |
| NM_018366 | Homo sapiens hypothetical protein FLJ11230 (FLJ11230), mRNA                |
| NM_018365 | Homo sapiens hypothetical protein FLJ11222 (FLJ11222), mRNA                |
| NM_018360 | Homo sapiens hypothetical protein FLJ11209 (FLJ11209), mRNA                |
| NM_018359 | Homo sapiens hypothetical protein FLJ11200 (FLJ11200), mRNA                |
| NM_018357 | Homo sapiens hypothetical protein FLJ11196 (FLJ11196), mRNA                |
| NM_018356 | Homo sapiens hypothetical protein FLJ11193 (FLJ11193), mRNA                |
| NM_018355 | Homo sapiens hypothetical protein FLJ11191 (FLJ11191), mRNA                |
| NM_018351 | Homo sapiens hypothetical protein FLJ11183 (FLJ11183), mRNA                |
| NM_018350 | Homo sapiens hypothetical protein FLJ11181 (FLJ11181), mRNA                |
| NM_018349 | Homo sapiens hypothetical protein FLJ11175 (FLJ11175), mRNA                |
| NM_018348 | Homo sapiens hypothetical protein FLJ11171 (FLJ11171), mRNA                |
| NM_018346 | Homo sapiens hypothetical protein FLJ11164 (FLJ11164), mRNA                |
| NM_018344 | Homo sapiens hypothetical protein FLJ11160 (FLJ11160), mRNA                |
| NM_018343 | Homo sapiens hypothetical protein FLJ11159 (FLJ11159), mRNA                |
| NM_018342 | Homo sapiens hypothetical protein FLJ11155 (FLJ11155), mRNA                |
| NM_018338 | Homo sapiens hypothetical protein FLJ11142 (FLJ11142), mRNA                |
| NM_018335 | Homo sapiens hypothetical protein FLJ11132 (FLJ11132), mRNA                |
| NM_018329 | Homo sapiens hypothetical protein FLJ11117 (FLJ11117), mRNA                |
| NM_018328 | Homo sapiens hypothetical protein FLJ11113 (FLJ11113), mRNA                |
| NM_018326 | Homo sapiens hypothetical protein FLJ11110 (FLJ11110), mRNA                |
| NM_018324 | Homo sapiens hypothetical protein FLJ11106 (FLJ11106), mRNA                |
| NM_018323 | Homo sapiens hypothetical protein FLJ11105 (FLJ11105), mRNA                |
| NM_018321 | Homo sapiens hypothetical protein FLJ11100 (FLJ11100), mRNA                |

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| NM_018316 | Homo sapiens hypothetical protein FLJ11078 (FLJ11078), mRNA                     |
| NM_018314 | Homo sapiens hypothetical protein FLJ11068 (FLJ11068), mRNA                     |
| NM_018309 | Homo sapiens hypothetical protein FLJ11046 (FLJ11046), mRNA                     |
| NM_018308 | Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA                     |
| NM_018307 | Homo sapiens hypothetical protein FLJ11040 (FLJ11040), mRNA                     |
| NM_018306 | Homo sapiens hypothetical protein FLJ11036 (FLJ11036), mRNA                     |
| NM_018304 | Homo sapiens hypothetical protein FLJ11029 (FLJ11029), mRNA                     |
| NM_018302 | Homo sapiens hypothetical protein FLJ11017 (FLJ11017), mRNA                     |
| NM_018299 | Homo sapiens hypothetical protein FLJ11011 (FLJ11011), mRNA                     |
| NM_018297 | Homo sapiens peptide:N-glycanase similar to yeast PNG1 (FLJ11005), mRNA         |
| NM_018296 | Homo sapiens hypothetical protein FLJ11004 (FLJ11004), mRNA                     |
| NM_018294 | Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA                     |
| NM_018292 | Homo sapiens hypothetical protein FLJ10989 (FLJ10989), mRNA                     |
| NM_018289 | Homo sapiens hypothetical protein FLJ10979 (FLJ10979), mRNA                     |
| NM_018288 | Homo sapiens hypothetical protein FLJ10975 (FLJ10975), mRNA                     |
| NM_018279 | Homo sapiens hypothetical protein FLJ10936 (FLJ10936), mRNA                     |
| NM_018275 | Homo sapiens hypothetical protein FLJ10925 (FLJ10925), mRNA                     |
| NM_018271 | Homo sapiens hypothetical protein FLJ10916 (FLJ10916), mRNA                     |
| NM_018264 | Homo sapiens hypothetical protein FLJ10900 (FLJ10900), mRNA                     |
| NM_018261 | Homo sapiens Sec3-like (SEC3), mRNA   |
| NM_018260 | Homo sapiens hypothetical protein FLJ10891 (FLJ10891), mRNA                     |
| NM_018259 | Homo sapiens hypothetical protein FLJ10890 (FLJ10890), mRNA                     |
| NM_018250 | Homo sapiens hypothetical protein FLJ10871 (FLJ10871), mRNA                     |
| NM_018248 | Homo sapiens hypothetical protein FLJ10858 (FLJ10858), mRNA                     |
| NM_018247 | Homo sapiens hypothetical protein FLJ10856 (FLJ10856), mRNA                     |
| NM_018246 | Homo sapiens hypothetical protein FLJ10853 (FLJ10853), mRNA                     |
| NM_018243 | Homo sapiens hypothetical protein FLJ10849 (FLJ10849), mRNA                     |
| NM_018238 | Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA                     |
| NM_018235 | Homo sapiens hypothetical protein FLJ10830 (FLJ10830), mRNA                     |
| NM_018234 | Homo sapiens hypothetical protein FLJ10829 (FLJ10829), mRNA                     |
| NM_018231 | Homo sapiens hypothetical protein FLJ10815 (FLJ10815), mRNA                     |
| NM_018229 | Homo sapiens hypothetical protein FLJ10813 (FLJ10813), mRNA                     |
| NM_018228 | Homo sapiens hypothetical protein FLJ10811 (FLJ10811), mRNA                     |
| NM_018227 | Homo sapiens hypothetical protein FLJ10808 (FLJ10808), mRNA                     |
| NM_018224 | Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA                     |
| NM_018222 | Homo sapiens parvin, alpha (PARVA), mRNA  |
| NM_018221 | Homo sapiens chromosome 2 open reading frame 6 (C2orf6), mRNA                   |
| NM_018216 | Homo sapiens hypothetical protein FLJ10782 (FLJ10782), mRNA                     |
| NM_018215 | Homo sapiens hypothetical protein FLJ10781 (FLJ10781), mRNA                     |
| NM_018214 | Homo sapiens LAP (leucine-rich repeats and PDZ) and no PDZ protein (LANO), mRNA |
| NM_018210 | Homo sapiens hypothetical protein FLJ10769 (FLJ10769), mRNA                     |
| NM_018208 | Homo sapiens hypothetical protein FLJ10761 (FLJ10761), mRNA                     |
| NM_018203 | Homo sapiens hypothetical protein FLJ10748 (FLJ10748), mRNA                     |
| NM_018201 | Homo sapiens hypothetical protein FLJ10743 (FLJ10743), mRNA                     |
| NM_018199 | Homo sapiens hypothetical protein FLJ10738 (FLJ10738), mRNA                     |
| NM_018198 | Homo sapiens hypothetical protein FLJ10737 (FLJ10737), mRNA                     |
| NM_018196 | Homo sapiens epsilon-trimethyllysine hydroxylase (FLJ10727), mRNA               |
| NM_018195 | Homo sapiens hypothetical protein FLJ10726 (FLJ10726), mRNA                     |
| NM_018190 | Homo sapiens hypothetical protein FLJ10715 (FLJ10715), mRNA                     |
| NM_018189 | Homo sapiens hypothetical protein FLJ10713 (FLJ10713), mRNA                     |

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| NM_018183 | Homo sapiens hypothetical protein FLJ10701 (FLJ10701), mRNA                          |
| NM_018182 | Homo sapiens hypothetical protein FLJ10700 (FLJ10700), mRNA                          |
| NM_018181 | Homo sapiens hypothetical protein FLJ10697 (FLJ10697), mRNA                          |
| NM_018176 | Homo sapiens hypothetical protein FLJ10675 (FLJ10675), mRNA                          |
| NM_018174 | Homo sapiens chromosome 19 open reading frame 5 (C19orf5), mRNA                      |
| NM_018173 | Homo sapiens hypothetical protein FLJ10665 (FLJ10665), mRNA                          |
| NM_018172 | Homo sapiens hypothetical protein FLJ10661 (FLJ10661), mRNA                          |
| NM_018170 | Homo sapiens hypothetical protein FLJ10656 (FLJ10656), mRNA                          |
| NM_018168 | Homo sapiens hypothetical protein FLJ10650 (FLJ10650), mRNA                          |
| NM_018167 | Homo sapiens hypothetical protein FLJ10648 (FLJ10648), mRNA                          |
| NM_018166 | Homo sapiens hypothetical protein FLJ10647 (FLJ10647), mRNA                          |
| NM_018163 | Homo sapiens hypothetical protein FLJ10634 (FLJ10634), mRNA                          |
| NM_018157 | Homo sapiens hypothetical protein FLJ10620 (FLJ10620), mRNA                          |
| NM_018156 | Homo sapiens hypothetical protein FLJ10619 (FLJ10619), mRNA                          |
| NM_018155 | Homo sapiens hypothetical protein FLJ10618 (FLJ10618), mRNA                          |
| NM_018154 | Homo sapiens hypothetical protein FLJ10604 (FLJ10604), mRNA                          |
| NM_018150 | Homo sapiens hypothetical protein FLJ10597 (FLJ10597), mRNA                          |
| NM_018149 | Homo sapiens hypothetical protein FLJ10587 (FLJ10587), mRNA                          |
| NM_018148 | Homo sapiens hypothetical protein FLJ10583 (FLJ10583), mRNA                          |
| NM_018146 | Homo sapiens hypothetical protein FLJ10581 (FLJ10581), mRNA                          |
| NM_018145 | Homo sapiens hypothetical protein FLJ10579 (FLJ10579), mRNA                          |
| NM_018143 | Homo sapiens hypothetical protein FLJ10572 (FLJ10572), mRNA                          |
| NM_018140 | Homo sapiens hypothetical protein FLJ10565 (FLJ10565), mRNA                          |
| NM_018139 | Homo sapiens hypothetical protein FLJ10563 (FLJ10563), mRNA                          |
| NM_018138 | Homo sapiens hypothetical protein FLJ10560 (FLJ10560), mRNA                          |
| NM_018132 | Homo sapiens hypothetical protein FLJ10545 (FLJ10545), mRNA                          |
| NM_018130 | Homo sapiens hypothetical protein FLJ10539 (FLJ10539), mRNA                          |
| NM_018129 | Homo sapiens hypothetical protein FLJ10535 (FLJ10535), mRNA                          |
| NM_018128 | Homo sapiens hypothetical protein FLJ10534 (FLJ10534), mRNA                          |
| NM_018126 | Homo sapiens hypothetical protein FLJ10525 (FLJ10525), mRNA                          |
| NM_018125 | Homo sapiens hypothetical protein FLJ10521 (FLJ10521), mRNA                          |
| NM_018121 | Homo sapiens hypothetical protein FLJ10512 (FLJ10512), mRNA                          |
| NM_018118 | Homo sapiens hypothetical protein FLJ10508 (FLJ10508), mRNA                          |
| NM_018115 | Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA                          |
| NM_018113 | Homo sapiens lipocalin-interacting membrane receptor (LIMR), mRNA                    |
| NM_018111 | Homo sapiens hypothetical protein FLJ10490 (FLJ10490), mRNA                          |
| NM_018110 | Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA                          |
| NM_018109 | Homo sapiens hypothetical protein FLJ10486 (FLJ10486), mRNA                          |
| NM_018108 | Homo sapiens hypothetical protein FLJ10483 (FLJ10483), mRNA                          |
| NM_018105 | Homo sapiens hypothetical protein FLJ10477 (FLJ10477), mRNA                          |
| NM_018104 | Homo sapiens hypothetical protein FLJ10474 (FLJ10474), mRNA                          |
| NM_018096 | Homo sapiens hypothetical protein similar to beta-transducin family (FLJ10458), mRNA |
| NM_018095 | Homo sapiens hypothetical protein FLJ10450 (FLJ10450), mRNA                          |
| NM_018089 | Homo sapiens hypothetical protein FLJ10415 (FLJ10415), mRNA                          |
| NM_018088 | Homo sapiens hypothetical protein FLJ10408 (FLJ10408), mRNA                          |
| NM_018084 | Homo sapiens hypothetical protein FLJ10392 (FLJ10392), mRNA                          |
| NM_018083 | Homo sapiens zinc finger protein 358 (ZNF358), mRNA                                  |
| NM_018082 | Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA                          |
| NM_018081 | Homo sapiens hypothetical protein FLJ10385 (FLJ10385), mRNA                          |
| NM_018080 | Homo sapiens hypothetical protein FLJ10381 (FLJ10381), mRNA                          |

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| NM_018077 | Homo sapiens hypothetical protein FLJ10377 (FLJ10377), mRNA                                  |
| NM_018071 | Homo sapiens hypothetical protein FLJ10357 (FLJ10357), mRNA                                  |
| NM_018068 | Homo sapiens likely ortholog of mouse piwi like homolog 1 (Drosophila)-like (FLJ10351), mRNA |
| NM_018067 | Homo sapiens hypothetical protein FLJ10350 (FLJ10350), mRNA                                  |
| NM_018066 | Homo sapiens hypothetical protein FLJ10349 (FLJ10349), mRNA                                  |
| NM_018065 | Homo sapiens hypothetical protein FLJ10346 (FLJ10346), mRNA                                  |
| NM_018061 | Homo sapiens hypothetical protein FLJ10330 (FLJ10330), mRNA                                  |
| NM_018056 | Homo sapiens hypothetical protein FLJ10315 (FLJ10315), mRNA                                  |
| NM_018055 | Homo sapiens hypothetical protein FLJ10314 (FLJ10314), mRNA                                  |
| NM_018048 | Homo sapiens hypothetical protein FLJ10292 (FLJ10292), mRNA                                  |
| NM_018045 | Homo sapiens hypothetical protein FLJ10276 (FLJ10276), mRNA                                  |
| NM_018042 | Homo sapiens hypothetical protein FLJ10260 (FLJ10260), mRNA                                  |
| NM_018037 | Homo sapiens hypothetical protein FLJ10244 (FLJ10244), mRNA                                  |
| NM_018036 | Homo sapiens hypothetical protein FLJ10242 (FLJ10242), mRNA                                  |
| NM_018029 | Homo sapiens hypothetical protein FLJ10213 (FLJ10213), mRNA                                  |
| NM_018027 | Homo sapiens hypothetical protein FLJ10210 (FLJ10210), mRNA                                  |
| NM_018024 | Homo sapiens hypothetical protein FLJ10204 (FLJ10204), mRNA                                  |
| NM_018022 | Homo sapiens hypothetical protein FLJ10199 (FLJ10199), mRNA                                  |
| NM_018017 | Homo sapiens hypothetical protein FLJ10188 (FLJ10188), mRNA                                  |
| NM_018014 | Homo sapiens B-cell CLL/lymphoma 11A (zinc finger protein) (BCL11A), mRNA                    |
| NM_018013 | Homo sapiens hypothetical protein FLJ10159 (FLJ10159), mRNA                                  |
| NM_018012 | Homo sapiens hypothetical protein FLJ10157 (FLJ10157), mRNA                                  |
| NM_018005 | Homo sapiens hypothetical protein FLJ10139 (FLJ10139), mRNA                                  |
| NM_017998 | Homo sapiens hypothetical protein FLJ10110 (FLJ10110), mRNA                                  |
| NM_017996 | Homo sapiens hypothetical protein FLJ10103 (FLJ10103), mRNA                                  |
| NM_017986 | Homo sapiens hypothetical protein FLJ10060 (FLJ10060), mRNA                                  |
| NM_017985 | Homo sapiens hypothetical protein FLJ10058 (FLJ10058), mRNA                                  |
| NM_017984 | Homo sapiens hypothetical protein FLJ10057 (FLJ10057), mRNA                                  |
| NM_017983 | Homo sapiens hypothetical protein FLJ10055 (FLJ10055), mRNA                                  |
| NM_017982 | Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA                                  |
| NM_017980 | Homo sapiens hypothetical protein FLJ10044 (FLJ10044), mRNA                                  |
| NM_017977 | Homo sapiens hypothetical protein FLJ10040 (FLJ10040), mRNA                                  |
| NM_017974 | Homo sapiens hypothetical protein FLJ10035 (FLJ10035), mRNA                                  |
| NM_018410 | Homo sapiens hypothetical protein DKFZp762E1312 (DKFZp762E1312), mRNA                        |
| NM_018423 | Homo sapiens hypothetical protein DKFZp761P1010 (DKFZp761P1010), mRNA                        |
| NM_017597 | Homo sapiens hypothetical protein DKFZp761K1824 (DKFZp761K1824), mRNA                        |
| NM_018422 | Homo sapiens hypothetical protein DKFZp761K1423 (DKFZp761K1423), mRNA                        |
| NM_018421 | Homo sapiens hypothetical protein DKFZp761D1823 (DKFZp761D1823), mRNA                        |
| NM_017599 | Homo sapiens transmembrane protein vezatin (VEZATIN), mRNA                                   |
| NM_017594 | Homo sapiens hypothetical protein DKFZp761C07121 (DKFZp761C07121), mRNA                      |
| NM_017535 | Homo sapiens hypothetical protein DKFZp566H0824 (DKFZp566H0824), mRNA                        |
| NM_018705 | Homo sapiens hypothetical protein DKFZp547G183 (DKFZp547G183), mRNA                          |
| NM_017604 | Homo sapiens KIAA1023 protein (KIAA1023), mRNA   |

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| NM_017559 | Homo sapiens hypothetical protein DKFZp434H2215 (DKFZp434H2215), mRNA                               |
| NM_017598 | Homo sapiens hypothetical protein DKFZp434C0923 (DKFZp434C0923), mRNA                               |
| NM_017577 | Homo sapiens hypothetical protein DKFZp434C0328 (DKFZp434C0328), mRNA                               |
| NM_014612 | Homo sapiens C9orf10 protein (C9orf10), mRNA  |
| NM_018460 | Homo sapiens uncharacterized bone marrow protein BM046 (BM046), mRNA                                |
| NM_018459 | Homo sapiens uncharacterized bone marrow protein BM045 (BM045), mRNA                                |
| NM_018451 | Homo sapiens centrosomal P4.1-associated protein (CPAP), mRNA                                       |
| NM_018450 | Homo sapiens uncharacterized bone marrow protein BM029 (BM029), mRNA                                |
| NM_018674 | Homo sapiens putative acid-sensing ion channel (ASIC4), mRNA  |
| NM_017435 | Homo sapiens solute carrier family 21 (organic anion transporter), member 14 (SLC21A14), mRNA       |
| NM_016848 | Homo sapiens neuronal Shc (SHC3), mRNA  |
| NM_017432 | Homo sapiens prostate tumor over expressed gene 1 (PTOV1), mRNA                                     |
| NM_016953 | Homo sapiens phosphodiesterase 11A (PDE11A), mRNA   |
| NM_013242 | Homo sapiens similar to mouse Glt3 or D. melanogaster transcription factor IIB (AF093680), mRNA     |
| NM_016267 | Homo sapiens TONDU (TONDU), mRNA  |
| NM_015859 | Homo sapiens general transcription factor IIA, 1 (37kD and 19kD subunits) (GTF2A1), mRNA            |
| NM_016271 | Homo sapiens STRIN protein (STRIN), mRNA  |
| NM_016584 | Homo sapiens interleukin 23, alpha subunit p19 (IL23A), mRNA  |
| NM_016329 | Homo sapiens RUI1 (RUI1), mRNA  |
| NM_016337 | Homo sapiens RNB6 (RNB6), mRNA  |
| NM_016146 | Homo sapiens PTD009 protein (PTD009), mRNA  |
| NM_016145 | Homo sapiens PTD008 protein (PTD008), mRNA  |
| NM_016144 | Homo sapiens PTD002 protein (PTD002), mRNA  |
| NM_016147 | Homo sapiens protein phosphatase methylesterase-1 (PME-1), mRNA                                     |
| NM_016445 | Homo sapiens pleckstrin 2 (mouse) homolog (PLEK2), mRNA   |
| NM_016170 | Homo sapiens NCX protein (NCX), mRNA  |
| NM_016132 | Homo sapiens myelin gene expression factor 2 (MEF-2), mRNA  |
| NM_016586 | Homo sapiens MBIP protein (MBIP), mRNA  |
| NM_016547 | Homo sapiens calcium binding protein Cab45 precursor (Cab45), mRNA                                  |
| NM_016530 | Homo sapiens RAB-8b protein (LOC51762), mRNA  |
| NM_016442 | Homo sapiens type 1 tumor necrosis factor receptor shedding aminopeptidase regulator (ARTS-1), mRNA |
| NM_016438 | Homo sapiens CLST 11240 protein (CLST11240), mRNA   |
| NM_016340 | Homo sapiens rap guanine nucleotide exchange factor (RA-GEF-2), mRNA                                |
| NM_016306 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 11 (DNAJB11), mRNA                           |
| NM_016292 | Homo sapiens heat shock protein 75 (TRAP1), mRNA  |
| NM_016248 | Homo sapiens A kinase (PRKA) anchor protein 11 (AKAP11), mRNA                                       |
| NM_016207 | Homo sapiens cleavage and polyadenylation specific factor 3, 73kD subunit (CPSF3), mRNA             |
| NM_016163 | Homo sapiens vesicle transport-related protein (RA410), mRNA  |
| NM_016106 | Homo sapiens vesicle transport-related protein (RA410), mRNA  |
| NM_016081 | Homo sapiens palladin (KIAA0992), mRNA  |
| NM_015934 | Homo sapiens nucleolar protein NOP5/NOP58 (NOP5/NOP58), mRNA  |
| NM_015925 | Homo sapiens liver-specific bHLH-Zip transcription factor (LISCH7), mRNA                            |
| NM_015878 | Homo sapiens ornithine decarboxylase antizyme inhibitor (OAZIN), mRNA                               |



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| NM_016284 | Homo sapiens KIAA1007 protein (KIAA1007), mRNA   |
| NM_016645 | Homo sapiens mesenchymal stem cell protein DSC92 (NEUGRIN), mRNA   |
| NM_016631 | Homo sapiens chromosome 21 open reading frame 66 (C21orf66), mRNA  |
| NM_016576 | Homo sapiens GMPR2 for guanosine monophosphate reductase isolog (LOC51292), mRNA   |
| NM_016501 | Homo sapiens hypothetical protein FLJ10597 (FLJ10597), mRNA  |
| NM_016500 | Homo sapiens hypothetical protein (LOC51260), mRNA   |
| NM_016487 | Homo sapiens HSPC230 gene (HSPC230), mRNA  |
| NM_016480 | Homo sapiens PABP-interacting protein 2 (PAIP2), mRNA  |
| NM_016433 | Homo sapiens glycolipid transfer protein (GLTP), mRNA  |
| NM_016369 | Homo sapiens claudin 18 (CLDN18), mRNA   |
| NM_016359 | Homo sapiens nucleolar protein ANKT (ANKT), mRNA   |
| NM_016246 | Homo sapiens retinal short-chain dehydrogenase/reductase retSDR3 (LOC51171), mRNA  |
| NM_016186 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 10 (SERPINA10), mRNA |
| NM_016180 | Homo sapiens AIM-1 protein (MATP), mRNA  |
| NM_016176 | Homo sapiens calcium binding protein Cab45 precursor (Cab45), mRNA   |
| NM_016174 | Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA  |
| NM_016131 | Homo sapiens RAB10, member RAS oncogene family (RAB10), mRNA   |
| NM_016031 | Homo sapiens elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 1 (ELOVL1), mRNA                         |
| NM_015955 | Homo sapiens C21orf19-like protein (LOC51072), mRNA  |
| NM_015931 | Homo sapiens fls485 (LOC51066), mRNA   |
| NM_015879 | Homo sapiens sialyltransferase 8C (alpha2,3Galbeta1,4GlcNAcalpha 2,8-sialyltransferase) (SIAT8C), mRNA                             |
| NM_016368 | Homo sapiens myo-inositol 1-phosphate synthase A1 (ISYNA1), mRNA   |
| NM_016488 | Homo sapiens hypothetical protein (HSPC232), mRNA  |
| NM_016478 | Homo sapiens hypothetical protein (HSPC216), mRNA  |
| NM_016463 | Homo sapiens hypothetical protein (HSPC195), mRNA  |
| NM_016410 | Homo sapiens hypothetical protein HSPC177 (HSPC177), mRNA  |
| NM_016406 | Homo sapiens hypothetical protein (HSPC155), mRNA  |
| NM_016401 | Homo sapiens hypothetical protein (HSPC138), mRNA  |
| NM_016400 | Homo sapiens Huntingtin interacting protein K (HYPK), mRNA   |
| NM_016396 | Homo sapiens hypothetical protein (HSPC129), mRNA  |
| NM_016391 | Homo sapiens hypothetical protein (HSPC111), mRNA  |
| NM_015933 | Homo sapiens hypothetical protein (HSPC016), mRNA  |
| NM_015932 | Homo sapiens hypothetical protein (HSPC014), mRNA  |
| NM_016172 | Homo sapiens putative glioblastoma cell differentiation-related (GDBR1), mRNA  |
| NM_016194 | Homo sapiens guanine nucleotide binding protein (G protein), beta 5 (GNB5), mRNA   |
| NM_016196 | Homo sapiens KIAA0682 gene product (KIAA0682), mRNA  |
| NM_016553 | Homo sapiens nucleoporin 62kD (NUP62), mRNA  |
| NM_016195 | Homo sapiens M-phase phosphoprotein 1 (MPHOSPH1), mRNA   |
| NM_016550 | Homo sapiens HeLa cyclin-dependent kinase 2 interacting protein (CINP), mRNA   |
| NM_016623 | Homo sapiens hypothetical protein (BM-009), mRNA   |
| NM_016237 | Homo sapiens anaphase promoting complex subunit 5 (ANAPC5), mRNA   |
| NM_016108 | Homo sapiens androgen induced protein (AIG-1), mRNA  |
| NM_014886 | Homo sapiens hypothetical protein (YR-29), mRNA  |
| NM_014035 | Homo sapiens SBB131 protein (SBB131), mRNA   |



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| NM_014868 | Homo sapiens ring finger protein 10 (RNF10), mRNA  |
| NM_014092 | Homo sapiens PRO1575 protein (PRO1575), mRNA   |
| NM_014138 | Homo sapiens PRO0659 protein (PRO0659), mRNA   |
| NM_014135 | Homo sapiens PRO0641 protein (PRO0641), mRNA   |
| NM_014134 | Homo sapiens PRO0628 protein (PRO0628), mRNA   |
| NM_014133 | Homo sapiens PRO0618 protein (PRO0618), mRNA   |
| NM_014076 | Homo sapiens PRO0611 protein (PRO0611), mRNA   |
| NM_014074 | Homo sapiens PRO0529 protein (PRO0529), mRNA   |
| NM_014129 | Homo sapiens PRO0478 protein (PRO0478), mRNA   |
| NM_014126 | Homo sapiens PRO0365 protein (PRO0365), mRNA   |
| NM_014124 | Homo sapiens PRO0255 protein (PRO0255), mRNA   |
| NM_014121 | Homo sapiens PRO0233 protein (PRO0233), mRNA   |
| NM_014120 | Homo sapiens PRO0214 protein (PRO0214), mRNA   |
| NM_014118 | Homo sapiens PRO0159 protein (PRO0159), mRNA   |
| NM_014117 | Homo sapiens PRO0149 protein (PRO0149), mRNA   |
| NM_014116 | Homo sapiens PRO0132 protein (PRO0132), mRNA   |
| NM_015364 | Homo sapiens MD-2 protein (MD-2), mRNA   |
| NM_014020 | Homo sapiens LR8 protein (LR8), mRNA   |
| NM_014931 | Homo sapiens KIAA1115 protein (KIAA1115), mRNA   |
| NM_014901 | Homo sapiens KIAA1100 protein (KIAA1100), mRNA   |
| NM_014908 | Homo sapiens KIAA1094 protein (KIAA1094), mRNA   |
| NM_014906 | Homo sapiens KIAA1072 protein (KIAA1072), mRNA   |
| NM_014932 | Homo sapiens neuroligin 1 (NLGN1), mRNA  |
| NM_014894 | Homo sapiens KIAA1056 protein (KIAA1056), mRNA   |
| NM_014956 | Homo sapiens KIAA1052 protein (KIAA1052), mRNA   |
| NM_014928 | Homo sapiens KIAA1046 protein (KIAA1046), mRNA   |
| NM_014909 | Homo sapiens KIAA1036 protein (KIAA1036), mRNA   |
| NM_014939 | Homo sapiens KIAA1012 protein (KIAA1012), mRNA   |
| NM_014895 | Homo sapiens KIAA1009 protein (KIAA1009), mRNA   |
| NM_014960 | Homo sapiens KIAA1001 protein (KIAA1001), mRNA   |
| NM_014950 | Homo sapiens KIAA0997 protein (KIAA0997), mRNA   |
| NM_014934 | Homo sapiens zinc-finger protein DZIP1 (DZIP1), mRNA                                     |
| NM_014023 | Homo sapiens KIAA0982 protein (KIAA0982), mRNA   |
| NM_014900 | Homo sapiens KIAA0977 protein (KIAA0977), mRNA   |
| NM_014929 | Homo sapiens KIAA0971 protein (KIAA0971), mRNA   |
| NM_014935 | Homo sapiens phosphoinositol 3-phosphate-binding protein-2 (PEPP3), mRNA                 |
| NM_014937 | Homo sapiens Sac domain-containing inositol phosphatase 2 (SAC2), mRNA                   |
| NM_014902 | Homo sapiens KIAA0964 protein (KIAA0964), mRNA   |
| NM_014898 | Homo sapiens KIAA0961 protein (KIAA0961), mRNA   |
| NM_014942 | Homo sapiens ankyrin repeat domain 6 (ANKRD6), mRNA                                      |
| NM_014959 | Homo sapiens tumor up-regulated CARD-containing antagonist of caspase nine (TUCAN), mRNA |
| NM_014952 | Homo sapiens KIAA0945 protein (KIAA0945), mRNA   |
| NM_014904 | Homo sapiens KIAA0941 protein (Rab11-FIP2), mRNA   |
| NM_014903 | Homo sapiens KIAA0938 protein (KIAA0938), mRNA   |
| NM_014897 | Homo sapiens KIAA0924 protein (KIAA0924), mRNA   |
| NM_014883 | Homo sapiens KIAA0914 gene product (KIAA0914), mRNA                                      |
| NM_014949 | Homo sapiens KIAA0907 protein (KIAA0907), mRNA   |
| NM_014896 | Homo sapiens KIAA0894 protein (KIAA0894), mRNA   |
| NM_014969 | Homo sapiens KIAA0893 protein (KIAA0893), mRNA   |
| NM_014966 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 30 (DDX30), mRNA               |

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| NM_015377 | Homo sapiens KIAA0889 protein (KIAA0889), mRNA  |
| NM_014936 | Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative function) (ENPP4), mRNA |
| NM_014940 | Homo sapiens KIAA0872 protein (KIAA0872), mRNA  |
| NM_014943 | Homo sapiens KIAA0854 protein (KIAA0854), mRNA  |
| NM_014926 | Homo sapiens KIAA0848 protein (KIAA0848), mRNA  |
| NM_014945 | Homo sapiens KIAA0843 protein (KIAA0843), mRNA  |
| NM_014924 | Homo sapiens KIAA0831 protein (KIAA0831), mRNA  |
| NM_014703 | Homo sapiens KIAA0800 gene product (KIAA0800), mRNA   |
| NM_014650 | Homo sapiens KIAA0798 gene product (KIAA0798), mRNA   |
| NM_014660 | Homo sapiens KIAA0783 gene product (KIAA0783), mRNA   |
| NM_014726 | Homo sapiens KIAA0775 gene product (KIAA0775), mRNA   |
| NM_014690 | Homo sapiens KIAA0773 gene product (KIAA0773), mRNA   |
| NM_014805 | Homo sapiens KIAA0766 gene product (KIAA0766), mRNA   |
| NM_014869 | Homo sapiens KIAA0763 gene product (KIAA0763), mRNA   |
| NM_014804 | Homo sapiens KIAA0753 gene product (KIAA0753), mRNA   |
| NM_014632 | Homo sapiens KIAA0750 gene product (KIAA0750), mRNA   |
| NM_014796 | Homo sapiens KIAA0748 gene product (KIAA0748), mRNA   |
| NM_014719 | Homo sapiens KIAA0738 gene product (KIAA0738), mRNA   |
| NM_014828 | Homo sapiens KIAA0737 gene product (KIAA0737), mRNA   |
| NM_014849 | Homo sapiens likely ortholog of mouse synaptic vesicle glycoprotein 2a (SV2), mRNA                |
| NM_014848 | Homo sapiens synaptic vesicle protein 2B homolog (SV2B), mRNA                                     |
| NM_014718 | Homo sapiens KIAA0726 gene product (KIAA0726), mRNA   |
| NM_014652 | Homo sapiens importin 13 (IMP13), mRNA  |
| NM_014867 | Homo sapiens KIAA0711 gene product (KIAA0711), mRNA   |
| NM_014852 | Homo sapiens KIAA0682 gene product (KIAA0682), mRNA   |
| NM_014663 | Homo sapiens KIAA0677 gene product (KIAA0677), mRNA   |
| NM_014648 | Homo sapiens KIAA0675 gene product (KIAA0675), mRNA   |
| NM_014779 | Homo sapiens KIAA0669 gene product (KIAA0669), mRNA   |
| NM_014811 | Homo sapiens KIAA0649 gene product (KIAA0649), mRNA   |
| NM_014817 | Homo sapiens KIAA0644 gene product (KIAA0644), mRNA   |
| NM_015046 | Homo sapiens KIAA0625 protein (KIAA0625), mRNA  |
| NM_014694 | Homo sapiens KIAA0605 gene product (KIAA0605), mRNA   |
| NM_014832 | Homo sapiens KIAA0603 gene product (KIAA0603), mRNA   |
| NM_014749 | Homo sapiens KIAA0586 gene product (KIAA0586), mRNA   |
| NM_014668 | Homo sapiens KIAA0575 gene product (KIAA0575), mRNA   |
| NM_014709 | Homo sapiens KIAA0570 gene product (KIAA0570), mRNA   |
| NM_014704 | Homo sapiens KIAA0562 gene product (KIAA0562), mRNA   |
| NM_014790 | Homo sapiens KIAA0555 gene product (KIAA0555), mRNA   |
| NM_014731 | Homo sapiens KIAA0552 gene product (KIAA0552), mRNA   |
| NM_014793 | Homo sapiens KIAA0547 gene product (KIAA0547), mRNA   |
| NM_014825 | Homo sapiens chromosome 21 open reading frame 108 (C21orf108), mRNA                               |
| NM_014840 | Homo sapiens KIAA0537 gene product (KIAA0537), mRNA   |
| NM_014682 | Homo sapiens KIAA0535 gene product (KIAA0535), mRNA   |
| NM_014851 | Homo sapiens KIAA0469 gene product (KIAA0469), mRNA   |
| NM_014638 | Homo sapiens KIAA0450 gene product (KIAA0450), mRNA   |
| NM_015556 | Homo sapiens KIAA0440 protein (KIAA0440), mRNA  |
| NM_014801 | Homo sapiens KIAA0435 gene product (KIAA0435), mRNA   |
| NM_014772 | Homo sapiens KIAA0427 gene product (KIAA0427), mRNA   |
| NM_014631 | Homo sapiens KIAA0418 gene product (KIAA0418), mRNA   |
| NM_014702 | Homo sapiens KIAA0408 gene product (KIAA0408), mRNA   |

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| NM_014672 | Homo sapiens KIAA0391 gene product (KIAA0391), mRNA                                       |
| NM_014717 | Homo sapiens KIAA0390 gene product (KIAA0390), mRNA                                       |
| NM_014686 | Homo sapiens KIAA0355 gene product (KIAA0355), mRNA                                       |
| NM_014872 | Homo sapiens KIAA0354 gene product (KIAA0354), mRNA                                       |
| NM_014830 | Homo sapiens KIAA0352 gene product (KIAA0352), mRNA                                       |
| NM_014636 | Homo sapiens Ral guanine nucleotide exchange factor RalGPS1A (RALGPS1A), mRNA             |
| NM_014635 | Homo sapiens KIAA0336 gene product (KIAA0336), mRNA                                       |
| NM_014803 | Homo sapiens KIAA0335 gene product (KIAA0335), mRNA                                       |
| NM_014844 | Homo sapiens KIAA0329 gene product (KIAA0329), mRNA                                       |
| NM_014821 | Homo sapiens KIAA0317 gene product (KIAA0317), mRNA                                       |
| NM_014699 | Homo sapiens KIAA0296 gene product (KIAA0296), mRNA                                       |
| NM_014742 | Homo sapiens KIAA0255 gene product (KIAA0255), mRNA                                       |
| NM_014734 | Homo sapiens KIAA0247 gene product (KIAA0247), mRNA                                       |
| NM_014760 | Homo sapiens KIAA0218 gene product (KIAA0218), mRNA                                       |
| NM_014735 | Homo sapiens KIAA0215 gene product (KIAA0215), mRNA                                       |
| NM_014630 | Homo sapiens KIAA0211 gene product (KIAA0211), mRNA                                       |
| NM_014744 | Homo sapiens KIAA0210 gene product (KIAA0210), mRNA                                       |
| NM_014725 | Homo sapiens KIAA0189 gene product (KIAA0189), mRNA                                       |
| NM_014753 | Homo sapiens KIAA0187 gene product (KIAA0187), mRNA                                       |
| NM_014791 | Homo sapiens likely ortholog of maternal embryonic leucine zipper kinase (KIAA0175), mRNA |
| NM_014746 | Homo sapiens KIAA0161 gene product (KIAA0161), mRNA                                       |
| NM_014633 | Homo sapiens KIAA0155 gene product (KIAA0155), mRNA                                       |
| NM_014002 | Homo sapiens IKK-related kinase epsilon; inducible IkappaB kinase (IKKE), mRNA            |
| NM_014847 | Homo sapiens KIAA0144 gene product (KIAA0144), mRNA                                       |
| NM_014773 | Homo sapiens KIAA0141 gene product (KIAA0141), mRNA                                       |
| NM_014649 | Homo sapiens KIAA0138 gene product (KIAA0138), mRNA                                       |
| NM_014792 | Homo sapiens KIAA0125 gene product (KIAA0125), mRNA                                       |
| NM_014999 | Homo sapiens KIAA0118 protein (KIAA0118), mRNA  |
| NM_014740 | Homo sapiens KIAA0111 gene product (KIAA0111), mRNA                                       |
| NM_014673 | Homo sapiens KIAA0103 gene product (KIAA0103), mRNA                                       |
| NM_014736 | Homo sapiens KIAA0101 gene product (KIAA0101), mRNA                                       |
| NM_014669 | Homo sapiens KIAA0095 gene product (KIAA0095), mRNA                                       |
| NM_014679 | Homo sapiens KIAA0092 gene product (KIAA0092), mRNA                                       |
| NM_014769 | Homo sapiens KIAA0087 gene product (KIAA0087), mRNA                                       |
| NM_014877 | Homo sapiens helicase KIAA0054 (KIAA0054), mRNA   |
| NM_014716 | Homo sapiens centaurin, beta 1 (CENTB1), mRNA   |
| NM_015361 | Homo sapiens R3H domain (binds single-stranded nucleic acids) containing (R3HDM), mRNA    |
| NM_014880 | Homo sapiens KIAA0022 gene product (KIAA0022), mRNA                                       |
| NM_014878 | Homo sapiens KIAA0020 gene product (KIAA0020), mRNA                                       |
| NM_014665 | Homo sapiens KIAA0014 gene product (KIAA0014), mRNA                                       |
| NM_014671 | Homo sapiens ubiquitin-protein isopeptide ligase (E3) (KIAA0010), mRNA                    |
| NM_014637 | Homo sapiens KIAA0009 gene product (KIAA0009), mRNA                                       |
| NM_015384 | Homo sapiens IDN3 protein (IDN3), mRNA  |
| NM_014188 | Homo sapiens HSPC182 protein (HSPC182), mRNA  |
| NM_014187 | Homo sapiens HSPC171 protein (HSPC171), mRNA  |
| NM_014182 | Homo sapiens HSPC160 protein (HSPC160), mRNA  |
| NM_014178 | Homo sapiens HSPC156 protein (HSPC156), mRNA  |
| NM_014177 | Homo sapiens HSPC154 protein (HSPC154), mRNA  |

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| NM_014176 | Homo sapiens HSPC150 protein similar to ubiquitin-conjugating enzyme (HSPC150), mRNA                                 |
| NM_014173 | Homo sapiens HSPC142 protein (HSPC142), mRNA   |
| NM_014172 | Homo sapiens HSPC141 protein (HSPC141), mRNA   |
| NM_014171 | Homo sapiens postsynaptic protein CRIP1 (CRIP1), mRNA  |
| NM_014169 | Homo sapiens HSPC134 protein (HSPC134), mRNA   |
| NM_014168 | Homo sapiens HSPC133 protein (HSPC133), mRNA   |
| NM_014167 | Homo sapiens HSPC128 protein (HSPC128), mRNA   |
| NM_014165 | Homo sapiens HSPC125 protein (HSPC125), mRNA   |
| NM_014163 | Homo sapiens HSPC073 protein (HSPC073), mRNA   |
| NM_014162 | Homo sapiens HSPC072 protein (HSPC072), mRNA   |
| NM_014159 | Homo sapiens Huntingtin interacting protein B (HYPB), mRNA   |
| NM_014158 | Homo sapiens HSPC067 protein (HSPC067), mRNA   |
| NM_014157 | Homo sapiens HSPC065 protein (HSPC065), mRNA   |
| NM_014152 | Homo sapiens HSPC054 protein (HSPC054), mRNA   |
| NM_014151 | Homo sapiens HSPC053 protein (HSPC053), mRNA   |
| NM_014148 | Homo sapiens HSPC048 protein (HSPC048), mRNA   |
| NM_014147 | Homo sapiens HSPC047 protein (HSPC047), mRNA   |
| NM_014041 | Homo sapiens signal peptidase 12kDa (SPC12), mRNA  |
| NM_014047 | Homo sapiens HSPC023 protein (HSPC023), mRNA   |
| NM_014028 | Homo sapiens HSPC019 protein (HSPC019), mRNA   |
| NM_014026 | Homo sapiens HSPC015 protein (HSPC015), mRNA   |
| NM_015362 | Homo sapiens HSPC002 protein (HSPC002), mRNA   |
| NM_015603 | Homo sapiens DKFZP586M1019 protein (DKFZP586M1019), mRNA   |
| NM_015537 | Homo sapiens DKFZP586J1624 protein (DKFZP586J1624), mRNA   |
| NM_015584 | Homo sapiens DKFZP586F1524 protein (DKFZP586F1524), mRNA   |
| NM_015677 | Homo sapiens hypothetical protein (DKFZP586F1318), mRNA  |
| NM_015416 | Homo sapiens DKFZP586A011 protein (DKFZP586A011), mRNA   |
| NM_015513 | Homo sapiens DKFZP566D213 protein (DKFZP566D213), mRNA   |
| NM_015509 | Homo sapiens DKFZP566B183 protein (DKFZP566B183), mRNA   |
| NM_014042 | Homo sapiens DKFZP564M082 protein (DKFZP564M082), mRNA   |
| NM_015455 | Homo sapiens KIAA1194 protein (KIAA1194), mRNA   |
| NM_015601 | Homo sapiens DKFZP564G092 protein (DKFZP564G092), mRNA   |
| NM_014044 | Homo sapiens DKFZP564G0222 protein (DKFZP564G0222), mRNA   |
| NM_015658 | Homo sapiens DKFZP564C186 protein (DKFZP564C186), mRNA   |
| NM_015654 | Homo sapiens DKFZP564C103 protein (DKFZP564C103), mRNA   |
| NM_015535 | Homo sapiens DKFZP564A2416 protein (DKFZP564A2416), mRNA   |
| NM_014034 | Homo sapiens DKFZP547E2110 protein (DKFZP547E2110), mRNA   |
| NM_015607 | Homo sapiens DKFZP547E1010 protein (DKFZP547E1010), mRNA   |
| NM_015594 | Homo sapiens DKFZP434O047 protein (DKFZP434O047), mRNA   |
| NM_015492 | Homo sapiens DKFZP434H132 protein (DKFZP434H132), mRNA   |
| NM_015515 | Homo sapiens type I intermediate filament cytokeratin (HAIK1), mRNA  |
| NM_014064 | Homo sapiens AD-003 protein (AD-003), mRNA   |
| NM_014517 | Homo sapiens upstream binding protein 1 (LBP-1a) (UBP1), mRNA  |
| NM_014294 | Homo sapiens translocating chain-associating membrane protein (TRAM), mRNA   |
| NM_014305 | Homo sapiens dTDP-D-glucose 4,6-dehydratase (TDPGD), mRNA  |
| NM_014300 | Homo sapiens signal peptidase complex (18kD) (SPC18), mRNA   |
| NM_014419 | Homo sapiens soggy-1 gene (DKKL1-pending), mRNA  |
| NM_014445 | Homo sapiens stress-associated endoplasmic reticulum protein 1; ribosome associated membrane protein 4 (SERP1), mRNA |
| NM_014329 | Homo sapiens autoantigen (RCD-8), mRNA   |

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| NM_014504 | Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX5), mRNA   |
| NM_014589 | Homo sapiens phospholipase A2, group IIE (PLA2G2E), mRNA  |
| NM_014471 | Homo sapiens serine protease inhibitor, Kazal type 4 (SPINK4), mRNA   |
| NM_014891 | Homo sapiens PDGFA associated protein 1 (PDAP1), mRNA   |
| NM_014308 | Homo sapiens phosphoinositide-3-kinase, regulatory subunit, polypeptide p101 (P101-PI3K), mRNA                        |
| NM_014359 | Homo sapiens opticin (OPTC), mRNA   |
| NM_014515 | Homo sapiens CCR4-NOT transcription complex, subunit 2 (CNOT2), mRNA  |
| NM_014360 | Homo sapiens NK-2 (Drosophila) homolog 8 (NKX2.8), mRNA   |
| NM_014371 | Homo sapiens neighbor of A-kinase anchoring protein 95 (NAKAP95), mRNA  |
| NM_014342 | Homo sapiens mitochondrial carrier homolog 2 (MTCH2), nuclear gene encoding mitochondrial protein, mRNA               |
| NM_015716 | Homo sapiens Misshapen/NIK-related kinase (MINK), mRNA  |
| NM_014358 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 9 (CLECSF9), mRNA |
| NM_014552 | Homo sapiens LBP protein 32 (LBP-32), mRNA  |
| NM_014247 | Homo sapiens PDZ domain containing guanine nucleotide exchange factor(GEF)1 (PDZ-GEF1), mRNA                          |
| NM_014267 | Homo sapiens small acidic protein (IMAGE145052), mRNA   |
| NM_014597 | Homo sapiens acidic 82 kDa protein mRNA (HSU15552), mRNA  |
| NM_014254 | Homo sapiens transmembrane protein 5 (TMEM5), mRNA  |
| NM_014362 | Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA   |
| NM_014365 | Homo sapiens protein kinase H11 (H11), mRNA   |
| NM_014584 | Homo sapiens ERO1-like (S. cerevisiae) (ERO1L), mRNA  |
| NM_014367 | Homo sapiens hypothetical protein, estradiol-induced (E2IG5), mRNA  |
| NM_014366 | Homo sapiens putative nucleotide binding protein, estradiol-induced (E2IG3), mRNA                                     |
| NM_014380 | Homo sapiens nerve growth factor receptor (TNFRSF16) associated protein 1 (NGFRAP1), mRNA                             |
| NM_014890 | Homo sapiens downregulated in ovarian cancer 1 (DOC1), mRNA   |
| NM_014595 | Homo sapiens 5' nucleotidase, deoxy (pyrimidine), cytosolic type C (NT5C), mRNA                                       |
| NM_014316 | Homo sapiens calcium-regulated heat-stable protein (24kD) (CRHSP-24), mRNA  |
| NM_014430 | Homo sapiens cell death-inducing DFFA-like effector b (CIDEB), mRNA   |
| NM_014400 | Homo sapiens GPI-anchored metastasis-associated protein homolog (C4.4A), mRNA   |
| NM_014408 | Homo sapiens similar to yeast BET3 (S. cerevisiae) (BET3), mRNA   |
| NM_014374 | Homo sapiens replication initiation region protein (60kD) (RIP60), mRNA   |
| NM_013943 | Homo sapiens chloride intracellular channel 4 (CLIC4), mRNA   |
| NM_013433 | Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA  |
| NM_013435 | Homo sapiens retinal homeobox protein (RX), mRNA  |
| NM_013377 | Homo sapiens hypothetical protein (DKFZp434B0417), mRNA   |
| NM_012297 | Homo sapiens Ras-GTPase activating protein SH3 domain-binding protein 2 (KIAA0660), mRNA                              |
| NM_013286 | Homo sapiens chromosome 3p21.1 gene sequence (HUMAGCGB), mRNA   |
| NM_012472 | Homo sapiens testis specific leucine rich repeat protein (TSLRP), mRNA  |
| NM_012119 | Homo sapiens cell cycle related kinase (CCRK), mRNA   |
| NM_013266 | Homo sapiens alpha-catenin-like protein (VR22), mRNA  |
| NM_013346 | Homo sapiens sorting nexin 12 (SNX12), mRNA   |
| NM_013322 | Homo sapiens sorting nexin 10 (SNX10), mRNA   |

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| NM_013400 | Homo sapiens replication initiation region protein (60kD) (RIP60), mRNA  |
| NM_013355 | Homo sapiens protein kinase PKNbeta (pknbeta), mRNA  |
| NM_013240 | Homo sapiens putative N6-DNA-methyltransferase (N6AMT1), mRNA  |
| NM_013364 | Homo sapiens paraneoplastic cancer-testis-brain antigen (MA5), mRNA  |
| NM_013275 | Homo sapiens nasopharyngeal carcinoma susceptibility protein (LZ16), mRNA  |
| NM_013312 | Homo sapiens hook2 protein (HOOK2), mRNA   |
| NM_013332 | Homo sapiens hypoxia-inducible protein 2 (HIG2), mRNA  |
| NM_013308 | Homo sapiens platelet activating receptor homolog (H963), mRNA   |
| NM_013394 | Homo sapiens acid fibroblast growth factor-like protein (GLIO703), mRNA  |
| NM_013329 | Homo sapiens chromosome 21 open reading frame 66 (C21orf66), mRNA  |
| NM_013333 | Homo sapiens EH domain-binding mitotic phosphoprotein (EPSIN), mRNA  |
| NM_013395 | Homo sapiens proteinx0008 (AD013), mRNA  |
| NM_012463 | Homo sapiens TJ6 protein (TJ6), mRNA   |
| NM_012461 | Homo sapiens TERF1 (TRF1)-interacting nuclear factor 2 (TINF2), mRNA   |
| NM_012245 | Homo sapiens SKI-interacting protein (SNW1), mRNA  |
| NM_012437 | Homo sapiens SNARE associated protein snapin (SNAPAP), mRNA  |
| NM_012433 | Homo sapiens splicing factor 3b, subunit 1, 155kD (SF3B1), mRNA  |
| NM_012431 | Homo sapiens sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E (SEMA3E), mRNA |
| NM_012234 | Homo sapiens RING1 and YY1 binding protein (RYBP), mRNA  |
| NM_012420 | Homo sapiens retinoic acid- and interferon-inducible protein (58kD) (RI58), mRNA                                   |
| NM_012417 | Homo sapiens retinal degeneration B beta (RDGBB), mRNA   |
| NM_012229 | Homo sapiens 5'-nucleotidase (purine), cytosolic type B (NT5B), mRNA   |
| NM_012390 | Homo sapiens protein homologous to salivary proline-rich protein P-B (PBI), mRNA                                   |
| NM_012346 | Homo sapiens nucleoporin 62kD (NUP62), mRNA  |
| NM_012339 | Homo sapiens transmembrane 4 superfamily member (tetraspan NET-7) (NET-7), mRNA                                    |
| NM_012338 | Homo sapiens transmembrane 4 superfamily member (tetraspan NET-2) (NET-2), mRNA                                    |
| NM_012332 | Homo sapiens Mitochondrial Acyl-CoA Thioesterase (MT-ACT48), mRNA  |
| NM_012327 | Homo sapiens phosphatidylinositol glycan, class N (PIGN), mRNA   |
| NM_012321 | Homo sapiens U6 snRNA-associated Sm-like protein (LSM4), mRNA  |
| NM_012294 | Homo sapiens guanine nucleotide exchange factor for Rap1; M-Ras-regulated GEF (KIAA0277), mRNA                     |
| NM_012289 | Homo sapiens Kelch-like ECH-associated protein 1 (KIAA0132), mRNA  |
| NM_012285 | Homo sapiens potassium voltage-gated channel, subfamily H (eag-related), member 4 (KCNH4), mRNA                    |
| NM_012267 | Homo sapiens hsp70-interacting protein (HSPBP1), mRNA  |
| NM_012266 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 5 (DNAJB5), mRNA  |
| NM_012260 | Homo sapiens 2-hydroxyphytanoyl-CoA lyase (HPCL2), mRNA  |
| NM_012204 | Homo sapiens general transcription factor IIIC, polypeptide 4 (90kD) (GTF3C4), mRNA                                |
| NM_012086 | Homo sapiens general transcription factor IIIC, polypeptide 3 (102kD) (GTF3C3), mRNA                               |
| NM_012155 | Homo sapiens microtubule-associated protein like echinoderm EMAP (EMAP-2), mRNA                                    |
| NM_012123 | Homo sapiens CGI-02 protein (CGI-02), mRNA   |
| NM_012097 | Homo sapiens ADP-ribosylation factor-like 5 (ARL5), mRNA   |
| NM_005028 | Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, alpha   |

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|           | (PIP5K2A), mRNA   |
| NM_006869 | Homo sapiens centaurin, alpha 1 (CENTA1), mRNA  |
| NM_007362 | Homo sapiens nuclear cap binding protein subunit 2, 20kD (NCBP2), mRNA  |
| NM_007358 | Homo sapiens putative DNA binding protein (M96), mRNA   |
| NM_007344 | Homo sapiens transcription termination factor, RNA polymerase I (TTF1), mRNA  |
| NM_007369 | Homo sapiens G-protein coupled receptor (RE2), mRNA   |
| NM_005176 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 2 (ATP5G2), mRNA |
| NM_007347 | Homo sapiens adaptor-related protein complex 4, epsilon 1 subunit (AP4E1), mRNA   |
| NM_002673 | Homo sapiens plexin B1 (PLXNB1), mRNA   |
| NM_007034 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 4 (DNAJB4), mRNA   |
| NM_004547 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4 (15kD, B15) (NDUFB4), mRNA                                      |
| NM_007180 | Homo sapiens trehalase (brush-border membrane glycoprotein) (TREH), mRNA  |
| NM_007115 | Homo sapiens tumor necrosis factor, alpha-induced protein 6 (TNFAIP6), mRNA   |
| NM_007217 | Homo sapiens programmed cell death 10 (PDCD10), mRNA  |
| NM_007269 | Homo sapiens syntaxin binding protein 3 (STXBP3), mRNA  |
| NM_007107 | Homo sapiens signal sequence receptor, gamma (translocon-associated protein gamma) (SSR3), mRNA                                   |
| NM_007282 | Homo sapiens ring finger protein 13 (RNF13), mRNA   |
| NM_007265 | Homo sapiens suppressor of <i>S. cerevisiae</i> gcr2 (HSGT1), mRNA  |
| NM_007223 | Homo sapiens putative G protein coupled receptor (GPR), mRNA  |
| NM_007192 | Homo sapiens chromatin-specific transcription elongation factor, 140 kDa subunit (FACTP140), mRNA                                 |
| NM_007263 | Homo sapiens coatamer protein complex, subunit epsilon (COPE), mRNA   |
| NM_007005 | Homo sapiens BCE-1 protein (BCE-1), mRNA  |
| NM_007019 | Homo sapiens ubiquitin-conjugating enzyme E2C (UBE2C), mRNA   |
| NM_007064 | Homo sapiens serine/threonine kinase with Dbl- and pleckstrin homology domains (TRAD), mRNA                                       |
| NM_007062 | Homo sapiens nuclear phosphoprotein similar to <i>S. cerevisiae</i> PWP1 (PWP1), mRNA   |
| NM_007080 | Homo sapiens Sm protein F (LSM6), mRNA  |
| NM_007072 | Homo sapiens HERV-H LTR-associating 2 (HHLA2), mRNA   |
| NM_007077 | Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (AP4S1), mRNA   |
| NM_006751 | Homo sapiens sperm specific antigen 2 (SSFA2), mRNA   |
| NM_006748 | Homo sapiens Src-like-adaptor (SLA), mRNA   |
| NM_006851 | Homo sapiens glioma pathogenesis-related protein (RTVP1), mRNA  |
| NM_006815 | Homo sapiens coated vesicle membrane protein (RNP24), mRNA  |
| NM_006741 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 1A (PPP1R1A), mRNA   |
| NM_006823 | Homo sapiens protein kinase (cAMP-dependent, catalytic) inhibitor alpha (PKIA), mRNA  |
| NM_006825 | Homo sapiens cytoskeleton-associated protein 4 (CKAP4), mRNA  |
| NM_006833 | Homo sapiens COP9 subunit 6 (MOV34 homolog, 34 kD) (MOV34-34KD), mRNA   |
| NM_006838 | Homo sapiens methionyl aminopeptidase 2 (METAP2), mRNA  |
| NM_006634 | Homo sapiens vesicle-associated membrane protein 5 (myobrevin) (VAMP5),   |

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|           | mRNA  |
| NM_006230 | Homo sapiens polymerase (DNA directed), delta 2, regulatory subunit (50kD) (POLD2), mRNA                    |
| NM_006156 | Homo sapiens neural precursor cell expressed, developmentally down-regulated 8 (NEDD8), mRNA                |
| NM_006369 | Homo sapiens MUF1 protein (MUF1), mRNA  |
| NM_006441 | Homo sapiens 5,10-methenyltetrahydrofolate synthetase (5-formyltetrahydrofolate cyclo-ligase) (MTHFS), mRNA |
| NM_006309 | Homo sapiens leucine rich repeat (in FLII) interacting protein 2 (LRRFIP2), mRNA                            |
| NM_006330 | Homo sapiens lysophospholipase I (LYPLA1), mRNA   |
| NM_006344 | Homo sapiens macrophage lectin 2 (calcium dependent) (HML2), mRNA   |
| NM_006395 | Homo sapiens ubiquitin activating enzyme E1-like protein (GSA7), mRNA                                       |
| NM_006322 | Homo sapiens spindle pole body protein (GCP3), mRNA   |
| NM_006141 | Homo sapiens dynein, cytoplasmic, light intermediate polypeptide 2 (DNCL12), mRNA                           |
| NM_006416 | Homo sapiens solute carrier family 35 (CMP-sialic acid transporter), member 1 (SLC35A1), mRNA               |
| NM_006349 | Homo sapiens putative cyclin G1 interacting protein (CG11), mRNA  |
| NM_006429 | Homo sapiens chaperonin containing TCPI, subunit 7 (eta) (CCT7), mRNA                                       |
| NM_006430 | Homo sapiens chaperonin containing TCPI, subunit 4 (delta) (CCT4), mRNA                                     |
| NM_006431 | Homo sapiens chaperonin containing TCPI, subunit 2 (beta) (CCT2), mRNA                                      |
| NM_002810 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 4 (PSMD4), mRNA                       |
| NM_006002 | Homo sapiens ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) (UCHL3), mRNA                |
| NM_006068 | Homo sapiens toll-like receptor 6 (TLR6), mRNA  |
| NM_006100 | Homo sapiens alpha2,3-sialyltransferase (ST3GALVI), mRNA  |
| NM_006061 | Homo sapiens specific granule protein (28 kDa) (SGP28), mRNA  |
| NM_006063 | Homo sapiens sarcomeric muscle protein (SARCOSIN), mRNA   |
| NM_006076 | Homo sapiens Rev/Rex activation domain binding protein-related (RAB-R), mRNA                                |
| NM_006034 | Homo sapiens p53-induced protein (PIG11), mRNA  |
| NM_006039 | Homo sapiens endocytic receptor (macrophage mannose receptor family) (KIAA0709), mRNA                       |
| NM_006018 | Homo sapiens putative chemokine receptor; GTP-binding protein (HM74), mRNA                                  |
| NM_006101 | Homo sapiens highly expressed in cancer, rich in leucine heptad repeats (HEC), mRNA                         |
| NM_006098 | Homo sapiens guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1 (GNB2L1), mRNA       |
| NM_005895 | Homo sapiens golgi autoantigen, golgin subfamily a, 3 (GOLGA3), mRNA  |
| NM_006023 | Homo sapiens D123 gene product (D123), mRNA   |
| NM_006090 | Homo sapiens choline/ethanolaminephosphotransferase (CEPT1), mRNA   |
| NM_005822 | Homo sapiens Down syndrome critical region gene 1-like 1 (DSCR1L1), mRNA                                    |
| NM_005827 | Homo sapiens UDP-galactose transporter related (UGTREL1), mRNA  |
| NM_005725 | Homo sapiens tetraspan 2 (TSPAN-2), mRNA  |
| NM_005879 | Homo sapiens TRAF interacting protein (TRIP), mRNA  |
| NM_005816 | Homo sapiens T cell activation, increased late expression (TACTILE), mRNA                                   |
| NM_005843 | Homo sapiens signal transducing adaptor molecule (SH3 domain and ITAM motif) 2 (STAM2), mRNA                |
| NM_005636 | Homo sapiens synovial sarcoma, X breakpoint 4 (SSX4), mRNA  |



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| NM_005775 | Homo sapiens vinexin beta (SH3-containing adaptor molecule-1) (SCAM-1), mRNA   |
| NM_005785 | Homo sapiens hypothetical SBB103 protein (SBB103), mRNA  |
| NM_005862 | Homo sapiens stromal antigen 1 (STAG1), mRNA   |
| NM_005619 | Homo sapiens reticulon 2 (RTN2), mRNA  |
| NM_005615 | Homo sapiens ribonuclease, RNase A family, k6 (RNASE6), mRNA   |
| NM_005771 | Homo sapiens retinol dehydrogenase homolog (RDHL), mRNA  |
| NM_005833 | Homo sapiens Rab9 effector p40 (RAB9P40), mRNA   |
| NM_005687 | Homo sapiens phenylalanyl-tRNA synthetase beta-subunit (PheHB), mRNA   |
| NM_005605 | Homo sapiens protein phosphatase 3 (formerly 2B), catalytic subunit, gamma isoform (calcineurin A gamma) (PPP3CC), mRNA            |
| NM_005796 | Homo sapiens nuclear transport factor 2 (placental protein 15) (PP15), mRNA  |
| NM_005742 | Homo sapiens protein disulfide isomerase-related protein (P5), mRNA  |
| NM_005824 | Homo sapiens 37 kDa leucine-rich repeat (LRR) protein (P37NB), mRNA  |
| NM_005861 | Homo sapiens STIP1 homology and U-Box containing protein 1 (STUB1), mRNA   |
| NM_005601 | Homo sapiens natural killer cell group 7 sequence (NKG7), mRNA   |
| NM_005831 | Homo sapiens nuclear domain 10 protein (NDP52), mRNA   |
| NM_005511 | Homo sapiens melan-A (MLANA), mRNA   |
| NM_005575 | Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA  |
| NM_005794 | Homo sapiens short-chain alcohol dehydrogenase family member (HEP27), mRNA   |
| NM_005769 | Homo sapiens carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4 (CHST4), mRNA   |
| NM_005828 | Homo sapiens WD-repeat protein (HAN11), mRNA   |
| NM_005804 | Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA  |
| NM_005505 | Homo sapiens CD36 antigen (collagen type I receptor, thrombospondin receptor)-like 1 (CD36L1), mRNA                                |
| NM_005760 | Homo sapiens CCAAT-box-binding transcription factor (CBF2), mRNA   |
| NM_005795 | Homo sapiens calcitonin receptor-like (CALCRL), mRNA   |
| NM_005720 | Homo sapiens actin related protein 2/3 complex, subunit 1B (41 kD) (ARPC1B), mRNA  |
| NM_005876 | Homo sapiens nuclear protein, marker for differentiated aortic smooth muscle and down-regulated with vascular injury (APEG1), mRNA |
| NM_001540 | Homo sapiens heat shock 27kD protein 1 (HSPB1), mRNA   |
| NM_005481 | Homo sapiens thyroid hormone receptor-associated protein, 95-kD subunit (TRAP95), mRNA   |
| NM_005449 | Homo sapiens regulator of Fas-induced apoptosis (TOSO), mRNA   |
| NM_005480 | Homo sapiens trophinin associated protein (tastin) (TROAP), mRNA   |
| NM_005419 | Homo sapiens signal transducer and activator of transcription 2, 113kD (STAT2), mRNA   |
| NM_005500 | Homo sapiens SUMO-1 activating enzyme subunit 1 (SAE1), mRNA   |
| NM_005400 | Homo sapiens protein kinase C, epsilon (PRKCE), mRNA   |
| NM_005391 | Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 3 (PDK3), mRNA   |
| NM_005494 | Homo sapiens DnaJ (Hsp40) homolog, subfamily B, member 6 (DNAJB6), mRNA  |
| NM_005466 | Homo sapiens RNA polymerase II transcriptional regulation mediator (Med6, S. cerevisiae, homolog of) (MED6), mRNA                  |
| NM_005310 | Homo sapiens growth factor receptor-bound protein 7 (GRB7), mRNA   |
| NM_005497 | Homo sapiens gap junction protein, alpha 7, 45kD (connexin 45) (GJA7), mRNA  |
| NM_005175 | Homo sapiens ATP synthase, H+ transporting, mitochondrial F0 complex,  |

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|           | subunit c (subunit 9), isoform 1 (ATP5G1), mRNA  |
| NM_003418 | Homo sapiens zinc finger protein 9 (a cellular retroviral nucleic acid binding protein) (ZNF9), mRNA   |
| NM_005151 | Homo sapiens ubiquitin specific protease 14 (tRNA-guanine transglycosylase) (USP14), mRNA  |
| NM_005119 | Homo sapiens thyroid hormone receptor-associated protein, 150 kDa subunit (TRAP150), mRNA  |
| NM_005071 | Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA                                |
| NM_005047 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 5 (PSMD5), mRNA  |
| NM_005134 | Homo sapiens protein phosphatase 4, regulatory subunit 1 (PPP4R1), mRNA  |
| NM_005033 | Homo sapiens polymyositis/scleroderma autoantigen 1 (75kD) (PMSCL1), mRNA  |
| NM_005025 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade I (neuroserpin), member 1 (SERPINI1), mRNA                                     |
| NM_005023 | Homo sapiens protein geranylgeranyltransferase type I, beta subunit (PGGT1B), mRNA   |
| NM_005020 | Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA   |
| NM_005017 | Homo sapiens phosphate cytidyltransferase 1, choline, alpha isoform (PCYT1A), mRNA   |
| NM_005131 | Homo sapiens nuclear matrix protein p84 (P84), mRNA  |
| NM_005101 | Homo sapiens interferon-stimulated protein, 15 kDa (ISG15), mRNA   |
| NM_005122 | Homo sapiens nuclear receptor subfamily 1, group I, member 3 (NR1I3), mRNA   |
| NM_004666 | Homo sapiens vanin 1 (VNN1), mRNA  |
| NM_004247 | Homo sapiens U5 snRNP-specific protein, 116 kD (U5-116KD), mRNA  |
| NM_004704 | Homo sapiens U3 snoRNP-associated 55-kDa protein (U3-55K), mRNA  |
| NM_004786 | Homo sapiens thioredoxin-like, 32kD (TXNL), mRNA   |
| NM_004257 | Homo sapiens TGF beta receptor associated protein -1 (TRAP-1), mRNA  |
| NM_004620 | Homo sapiens TNF receptor-associated factor 6 (TRAF6), mRNA  |
| NM_004604 | Homo sapiens syntaxin 4A (placental) (STX4A), mRNA   |
| NM_004785 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulatory factor 2 (SLC9A3R2), mRNA                             |
| NM_004252 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulatory factor 1 (SLC9A3R1), mRNA                             |
| NM_004694 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 6 (SLC16A6), mRNA   |
| NM_004696 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 4 (SLC16A4), mRNA   |
| NM_004263 | Homo sapiens sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4F (SEMA4F), mRNA |
| NM_004868 | Homo sapiens glycoprotein, synaptic 2 (GPSN2), mRNA  |
| NM_004844 | Homo sapiens SH3-domain binding protein 5 (BTK-associated) (SH3BP5), mRNA  |
| NM_004703 | Homo sapiens rabaptin-5 (RAB5EP), mRNA   |
| NM_004249 | Homo sapiens RAB28, member RAS oncogene family (RAB28), mRNA   |
| NM_004218 | Homo sapiens RAB11B, member RAS oncogene family (RAB11B), mRNA   |
| NM_004676 | Homo sapiens PTPN13-like, Y-linked (PRY), mRNA   |
| NM_004726 | Homo sapiens RALBP1 associated Eps domain containing 2 (REPS2), mRNA   |
| NM_004881 | Homo sapiens quinone oxidoreductase homolog (PIG3), mRNA   |

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| NM_004671 | Homo sapiens Protein inhibitor of activated STAT X (PIASX-BETA), mRNA   |
| NM_004565 | Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA   |
| NM_004845 | Homo sapiens phosphate cytidyltransferase 1, choline, beta isoform (PCYT1B), mRNA                                 |
| NM_004563 | Homo sapiens phosphoenolpyruvate carboxykinase 2 (mitochondrial) (PCK2), mRNA                                     |
| NM_004800 | Homo sapiens transmembrane 9 superfamily member 2 (TM9SF2), mRNA  |
| NM_004556 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA |
| NM_004647 | Homo sapiens Neuro-d4 (rat) homolog (NEUD4), mRNA   |
| NM_004546 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2 (8kD, AGGG) (NDUFB2), mRNA                      |
| NM_004545 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 1 (7kD, MNLL) (NDUFB1), mRNA                      |
| NM_004542 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3 (9kD, B9) (NDUFA3), mRNA                       |
| NM_004544 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10 (42kD) (NDUFA10), mRNA                        |
| NM_004784 | Homo sapiens N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3 (NDST3), mRNA                              |
| NM_004901 | Homo sapiens lysosomal apyrase-like 1 (LYSAL1), mRNA  |
| NM_004798 | Homo sapiens kinesin family member 3B (KIF3B), mRNA   |
| NM_004515 | Homo sapiens interleukin enhancer binding factor 2, 45kD (ILF2), mRNA   |
| NM_004838 | Homo sapiens Homer, neuronal immediate early gene, 3 (HOMER-3), mRNA  |
| NM_004854 | Homo sapiens HNK-1 sulfotransferase (HNK-1ST), mRNA   |
| NM_004488 | Homo sapiens glycoprotein V (platelet) (GP5), mRNA  |
| NM_004485 | Homo sapiens guanine nucleotide binding protein 4 (GNG4), mRNA  |
| NM_004122 | Homo sapiens growth hormone secretagogue receptor (GHSR), mRNA  |
| NM_004479 | Homo sapiens fucosyltransferase 7 (alpha (1,3) fucosyltransferase) (FUT7), mRNA                                   |
| NM_004438 | Homo sapiens EphA4 (EPHA4), mRNA  |
| NM_004094 | Homo sapiens eukaryotic translation initiation factor 2, subunit 1 (alpha, 35kD) (EIF2S1), mRNA                   |
| NM_004681 | Homo sapiens eukaryotic translation initiation factor 1A, Y chromosome (EIF1AY), mRNA                             |
| NM_004226 | Homo sapiens serine/threonine kinase 17b (apoptosis-inducing) (STK17B), mRNA                                      |
| NM_004792 | Homo sapiens peptidyl-prolyl isomerase G (cyclophilin G) (PPIG), mRNA   |
| NM_004831 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 7 (70kD) (CRSP7), mRNA                 |
| NM_004269 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 8 (34kD) (CRSP8), mRNA                 |
| NM_004270 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 9 (33kD) (CRSP9), mRNA                 |
| NM_004232 | Homo sapiens STAT induced STAT inhibitor-4 (CIS4), mRNA   |
| NM_004882 | Homo sapiens CBF1 interacting corepressor (CIR), mRNA   |
| NM_004198 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 6 (CHRNA6), mRNA                                  |
| NM_004825 | Homo sapiens chromodomain protein, Y chromosome, 2 (CDY2), mRNA   |
| NM_004351 | Homo sapiens Cas-Br-M (murine) ectropic retroviral transforming sequence b (CBLB), mRNA                           |
| NM_004054 | Homo sapiens complement component 3a receptor 1 (C3AR1), mRNA   |

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| NM_004899 | Homo sapiens brain and reproductive organ-expressed (TNFRSF1A modulator) (BRE), mRNA                                   |
| NM_004889 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit f, isoform 2 (ATP5J2), mRNA  |
| NM_004890 | Homo sapiens sperm associated antigen 7 (SPAG7), mRNA  |
| NM_004908 | Homo sapiens pre-T/NK cell associated protein (6H9A), mRNA   |
| NM_003406 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ), mRNA    |
| NM_003574 | Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA), mRNA                       |
| NM_001073 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11), mRNA   |
| NM_003300 | Homo sapiens TNF receptor-associated factor 3 (TRAF3), mRNA  |
| NM_003297 | Homo sapiens nuclear receptor subfamily 2, group C, member 1 (NR2C1), mRNA   |
| NM_003212 | Homo sapiens teratocarcinoma-derived growth factor 1 (TDGF1), mRNA   |
| NM_003763 | Homo sapiens syntaxin 16 (STX16), mRNA   |
| NM_003955 | Homo sapiens STAT induced STAT inhibitor 3 (SSI-3), mRNA   |
| NM_003693 | Homo sapiens acetyl LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC), mRNA                  |
| NM_003563 | Homo sapiens speckle-type POZ protein (SPOP), mRNA   |
| NM_003578 | Homo sapiens sterol O-acyltransferase 2 (SOAT2), mRNA  |
| NM_003099 | Homo sapiens sorting nexin 1 (SNX1), mRNA  |
| NM_003095 | Homo sapiens small nuclear ribonucleoprotein polypeptide F (SNRPF), mRNA   |
| NM_003091 | Homo sapiens small nuclear ribonucleoprotein polypeptides B and B1 (SNRPB), mRNA                                       |
| NM_003086 | Homo sapiens small nuclear RNA activating complex, polypeptide 4, 190kD (SNAPC4), mRNA                                 |
| NM_003084 | Homo sapiens small nuclear RNA activating complex, polypeptide 3, 50kD (SNAPC3), mRNA                                  |
| NM_003825 | Homo sapiens synaptosomal-associated protein, 23kD (SNAP23), mRNA  |
| NM_003983 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 6 (SLC7A6), mRNA |
| NM_003916 | Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA  |
| NM_003896 | Homo sapiens sialyltransferase 9 (CMP-NeuAc:lactosylceramide alpha-2,3-sialyltransferase; GM3 synthase) (SIAT9), mRNA  |
| NM_003769 | Homo sapiens splicing factor, arginine/serine-rich 9 (SFRS9), mRNA   |
| NM_003016 | Homo sapiens splicing factor, arginine/serine-rich 2 (SFRS2), mRNA   |
| NM_003161 | Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1), mRNA  |
| NM_003708 | Homo sapiens microsomal NAD <sup>+</sup> -dependent retinol dehydrogenase 4 (RODH-4), mRNA                             |
| NM_002933 | Homo sapiens ribonuclease, RNase A family, 1 (pancreatic) (RNASE1), mRNA   |
| NM_002919 | Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RFX3), mRNA                                  |
| NM_002865 | Homo sapiens RAB2, member RAS oncogene family (RAB2), mRNA   |
| NM_002849 | Homo sapiens protein tyrosine phosphatase, receptor type, R (PTPRR), mRNA  |
| NM_002822 | Homo sapiens protein tyrosine kinase 9 (PTK9), mRNA  |
| NM_002812 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 8 (PSMD8), mRNA                                  |
| NM_002808 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 2  |

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|           | (PSMD2), mRNA   |
| NM_002816 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 12 (PSMD12), mRNA   |
| NM_002814 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 10 (PSMD10), mRNA   |
| NM_002789 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 4 (PSMA4), mRNA   |
| NM_002787 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2), mRNA   |
| NM_000951 | Homo sapiens proline-rich Gla (G-carboxyglutamic acid) polypeptide 2 (PRRG2), mRNA  |
| NM_000950 | Homo sapiens proline-rich Gla (G-carboxyglutamic acid) polypeptide 1 (PRRG1), mRNA  |
| NM_002750 | Homo sapiens mitogen-activated protein kinase 8 (MAPK8), mRNA   |
| NM_003981 | Homo sapiens protein regulator of cytokinesis 1 (PRC1), mRNA  |
| NM_002717 | Homo sapiens protein phosphatase 2 (formerly 2A), regulatory subunit B (PR52), alpha isoform (PPP2R2A), mRNA                          |
| NM_002707 | Homo sapiens protein phosphatase 1G (formerly 2C), magnesium-dependent, gamma isoform (PPM1G), mRNA                                   |
| NM_003620 | Homo sapiens protein phosphatase 1D magnesium-dependent, delta isoform (PPM1D), mRNA  |
| NM_003625 | Homo sapiens protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 2 (PPFIA2), mRNA |
| NM_002698 | Homo sapiens POU domain, class 2, transcription factor 2 (POU2F2), mRNA   |
| NM_002687 | Homo sapiens pinin, desmosome associated protein (PNN), mRNA  |
| NM_003662 | Homo sapiens Pirin (PIR), mRNA  |
| NM_002647 | Homo sapiens phosphoinositide-3-kinase, class 3 (PIK3C3), mRNA  |
| NM_000286 | Homo sapiens peroxisomal biogenesis factor 12 (PEX12), mRNA   |
| NM_002861 | Homo sapiens phosphate cytidylyltransferase 2, ethanolamine (PCYT2), mRNA   |
| NM_002567 | Homo sapiens prostatic binding protein (PBP), mRNA  |
| NM_003899 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 7 (ARHGEF7), mRNA   |
| NM_002563 | Homo sapiens purinergic receptor P2Y, G-protein coupled, 1 (P2RY1), mRNA  |
| NM_000913 | Homo sapiens opiate receptor-like 1 (OPRL1), mRNA   |
| NM_002493 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6 (17kD, B17) (NDUFB6), mRNA  |
| NM_002492 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5 (16kD, SGD) (NDUFB5), mRNA  |
| NM_002489 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4 (9kD, MLRQ) (NDUFA4), mRNA   |
| NM_003684 | Homo sapiens MAP kinase-interacting serine/threonine kinase 1 (MKNK1), mRNA   |
| NM_003784 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 7 (SERPINB7), mRNA                                |
| NM_002333 | Homo sapiens low density lipoprotein receptor-related protein 3 (LRP3), mRNA  |
| NM_002285 | Homo sapiens lymphoid nuclear protein related to AF4 (LAF4), mRNA   |
| NM_002213 | Homo sapiens integrin, beta 5 (ITGB5), mRNA   |
| NM_003971 | Homo sapiens sperm associated antigen 9 (SPAG9), mRNA   |
| NM_002157 | Homo sapiens heat shock 10kD protein 1 (chaperonin 10) (HSPE1), mRNA  |
| NM_001521 | Homo sapiens general transcription factor IIIC, polypeptide 2 (beta subunit, 110kD) (GTF3C2), mRNA                                    |
| NM_001516 | Homo sapiens general transcription factor IIH, polypeptide 3 (34kD subunit)   |

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|           | (GTF2H3), mRNA   |
| NM_003910 | Homo sapiens maternal G10 transcript (G10), mRNA   |
| NM_001969 | Homo sapiens eukaryotic translation initiation factor 5 (EIF5), mRNA   |
| NM_003751 | Homo sapiens eukaryotic translation initiation factor 3, subunit 9 (eta, 116kD) (EIF3S9), mRNA                       |
| NM_003755 | Homo sapiens eukaryotic translation initiation factor 3, subunit 4 (delta, 44kD) (EIF3S4), mRNA                      |
| NM_003756 | Homo sapiens eukaryotic translation initiation factor 3, subunit 3 (gamma, 40kD) (EIF3S3), mRNA                      |
| NM_001414 | Homo sapiens eukaryotic translation initiation factor 2B, subunit 1 (alpha, 26kD) (EIF2B1), mRNA                     |
| NM_001412 | Homo sapiens eukaryotic translation initiation factor 1A (EIF1A), mRNA   |
| NM_003566 | Homo sapiens early endosome antigen 1, 162kD (EEA1), mRNA  |
| NM_001957 | Homo sapiens endothelin receptor type A (EDNRA), mRNA  |
| NM_001936 | Homo sapiens dipeptidylpeptidase VI (DPP6), mRNA   |
| NM_003648 | Homo sapiens diacylglycerol kinase, delta (130kD) (DGKD), mRNA   |
| NM_001921 | Homo sapiens dCMP deaminase (DCTD), mRNA   |
| NM_003590 | Homo sapiens cullin 3 (CUL3), mRNA   |
| NM_003592 | Homo sapiens cullin 1 (CUL1), mRNA   |
| NM_001207 | Homo sapiens basic transcription factor 3 (BTF3), mRNA   |
| NM_001191 | Homo sapiens BCL2-like 1 (BCL2L1), mRNA  |
| NM_001689 | Homo sapiens ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c (subunit 9) isoform 3 (ATP5G3), mRNA |
| NM_001688 | Homo sapiens ATP synthase, H+ transporting, mitochondrial F0 complex, subunit b, isoform 1 (ATP5F1), mRNA            |
| NM_003664 | Homo sapiens adaptor-related protein complex 3, beta 1 subunit (AP3B1), mRNA   |
| NM_058168 | Homo sapiens gene differentially expressed in prostate (GDEP), mRNA  |
| NM_058222 | Homo sapiens tectorin beta (TECTB), mRNA   |
| NM_058192 | Homo sapiens ribosomal large subunit pseudouridine synthase C like (RLUCL), mRNA                                     |
| NM_058190 | Homo sapiens chromosome 21 open reading frame 70 (C21orf70), mRNA  |
| NM_058189 | Homo sapiens chromosome 21 open reading frame 69 (C21orf69), mRNA  |
| NM_058186 | Homo sapiens chromosome 21 open reading frame 11 (C21orf11), mRNA  |
| NM_058184 | Homo sapiens chromosome 21 open reading frame 42 (C21orf42), mRNA  |
| NM_058182 | Homo sapiens chromosome 21 open reading frame 51 (C21orf51), mRNA  |
| NM_058180 | Homo sapiens chromosome 21 open reading frame 58 (C21orf58), mRNA  |
| NM_058173 | Homo sapiens small breast epithelial mucin (LOC118430), mRNA   |
| NM_058172 | Homo sapiens capillary morphogenesis protein 2 (CMG2), mRNA  |
| NM_017884 | Homo sapiens PIN2-interacting protein 1 (PINX1), mRNA  |
| NM_054021 | Homo sapiens G protein-coupled receptor 101 (GPR101), mRNA   |
| NM_053280 | Homo sapiens h-Shippo 1 (LOC113746), mRNA  |
| NM_003449 | Homo sapiens tripartite motif-containing 26 (TRIM26), mRNA   |
| NM_052939 | Homo sapiens Fc receptor-like protein 3 (FCRH3), mRNA  |
| NM_052938 | Homo sapiens Fc receptor-like protein 1 (FCRH1), mRNA  |
| NM_052872 | Homo sapiens interleukin 17F (IL17F), mRNA   |
| NM_024011 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 1, mRNA                                       |
| NM_033621 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 10, mRNA                                      |
| NM_033537 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 9, mRNA                                       |
| NM_033536 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 8, mRNA                                       |
| NM_033534 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 7, mRNA                                       |

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| NM_033532 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 6, mRNA                                      |
| NM_033531 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 5, mRNA                                      |
| NM_033529 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 4, mRNA                                      |
| NM_033528 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 3, mRNA                                      |
| NM_033527 | Homo sapiens cell division cycle 2-like 2 (CDC2L2), transcript variant 2, mRNA                                      |
| NM_006629 | Homo sapiens zinc finger protein 271 (ZNF271), mRNA   |
| NM_015294 | Homo sapiens tripartite motif-containing 37 (TRIM37), mRNA  |
| NM_033132 | Homo sapiens zinc family member 5 protein (ZIC5), mRNA  |
| NM_033108 | Homo sapiens heat shock transcription factor 2-like (LOC86614), mRNA  |
| NM_033106 | Homo sapiens galanin-like peptide precursor (LOC85569), mRNA  |
| NM_033105 | Homo sapiens beta cysteine string protein (LOC85479), mRNA  |
| NM_033104 | Homo sapiens stonin 2 (LOC85439), mRNA  |
| NM_033102 | Homo sapiens prostein protein (LOC85414), mRNA  |
| NM_003823 | Homo sapiens tumor necrosis factor receptor superfamily, member 6b, decoy (TNFRSF6B), transcript variant M68E, mRNA |
| NM_006470 | Homo sapiens tripartite motif-containing 16 (TRIM16), mRNA  |
| NM_032606 | Homo sapiens calcyphosine (LOC84698), mRNA  |
| NM_032595 | Homo sapiens neurabin II (LOC84687), mRNA   |
| NM_032584 | Homo sapiens zinc finger protein 347 (ZNF347), mRNA   |
| NM_032576 | Homo sapiens lipopolysaccharide-specific response 5-like protein (LOC84663), mRNA                                   |
| NM_032518 | Homo sapiens collagen-like Alzheimer amyloid plaque component precursor (LOC84570), mRNA                            |
| NM_032509 | Homo sapiens RNA binding protein (LOC84549), mRNA   |
| NM_032484 | Homo sapiens hypothetical protein (LOC84514), mRNA  |
| NM_032389 | Homo sapiens zinc finger protein 289, ID1 regulated (ZNF289), mRNA  |
| NM_031918 | Homo sapiens Kruppel-like factor 16 (KLF16), mRNA   |
| NM_031463 | Homo sapiens steroid dehydrogenase-like (LOC83693), mRNA  |
| NM_031461 | Homo sapiens CocoaCrisp (LOC83690), mRNA  |
| NM_031417 | Homo sapiens MAP/microtubule affinity-regulating kinase like 1 (MARKL1), mRNA                                       |
| NM_030791 | Homo sapiens sphingosine-1-phosphatase (LOC81537), mRNA   |
| NM_024670 | Homo sapiens suppressor of variegation 3-9 (Drosophila) homolog 2; hypothetical protein FLJ23414 (SUV39H2), mRNA    |
| NM_003414 | Homo sapiens zinc finger protein 267 (ZNF267), transcript variant 498723, mRNA                                      |
| NM_023945 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 5 (MS4A5), mRNA                                       |
| NM_023014 | Homo sapiens hypothetical protein similar to preferentially expressed antigen of melanoma (LOC65122), mRNA          |
| NM_023013 | Homo sapiens hypothetical protein similar to preferentially expressed antigen of melanoma (LOC65121), mRNA          |
| NM_022357 | Homo sapiens putative metallopeptidase (family M19) (LOC64180), mRNA  |
| NM_022355 | Homo sapiens putative dipeptidase (LOC64174), mRNA  |
| NM_022353 | Homo sapiens putative sialoglycoprotease type 2 (LOC64172), mRNA  |
| NM_022345 | Homo sapiens uterine-derived 14 kDa protein (LOC64150), mRNA  |
| NM_022343 | Homo sapiens 17kD fetal brain protein (LOC64148), mRNA  |
| NM_022340 | Homo sapiens FYVE-finger-containing Rab5 effector protein rabenosyn-5 (LOC64145), mRNA                              |
| NM_021932 | Homo sapiens hypothetical protein from EUROIMAGE 1987170 (LOC60626), mRNA   |
| NM_021931 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 35 (DDX35), mRNA  |

|           | mRNA  |
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| NM_021632 | Homo sapiens zinc-finger protein ZBRK1 (ZBRK1), mRNA                                    |
| NM_021630 | Homo sapiens PDZ-LIM protein mystique (LOC59346), mRNA                                  |
| NM_019591 | Homo sapiens zinc finger protein 26 (KOX 20) (ZNF26), mRNA                              |
| NM_018675 | Homo sapiens zinc finger protein 302 (ZNF302), mRNA                                     |
| NM_021226 | Homo sapiens hypothetical protein from clones 23549 and 23762 (LOC58504), mRNA          |
| NM_021211 | Homo sapiens transposon-derived Buster1 transposase-like protein (LOC58486), mRNA       |
| NM_021186 | Homo sapiens zona pellucida glycoprotein 4 (ZP4), mRNA                                  |
| NM_020903 | Homo sapiens ubiquitin-specific processing protease (LOC57663), mRNA                    |
| NM_020666 | Homo sapiens CDC-like kinase 4 (CLK4), mRNA   |
| NM_020421 | Homo sapiens hypothetical protein (LOC57143), mRNA                                      |
| NM_020140 | Homo sapiens putative 47 kDa protein (LOC56899), mRNA                                   |
| NM_016305 | Homo sapiens synovial sarcoma translocation gene on chromosome 18-like 2 (SS18L2), mRNA |
| NM_016417 | Homo sapiens clone FLB4739 (LOC51218), mRNA   |
| NM_020467 | Homo sapiens hypothetical protein from clone 643 (LOC57228), mRNA                       |
| NM_020389 | Homo sapiens putative capacitative calcium channel (trp7), mRNA                         |
| NM_020385 | Homo sapiens XPMC2 protein (LOC57109), mRNA   |
| NM_020381 | Homo sapiens candidate tumor suppressor protein (LOC57107), mRNA                        |
| NM_020372 | Homo sapiens organic cation transporter (LOC57100), mRNA                                |
| NM_020158 | Homo sapiens exosome component Rrp46 (RRP46), mRNA                                      |
| NM_020147 | Homo sapiens hypothetical protein from EUROIMAGE 511235 (LOC56906), mRNA                |
| NM_020154 | Homo sapiens chromosome 11 hypothetical protein ORF3 (LOC56851), mRNA                   |
| NM_019613 | Homo sapiens hypothetical protein 628 (LOC56270), mRNA                                  |
| NM_019059 | Homo sapiens 6.2 kd protein (LOC54543), mRNA  |
| NM_019037 | Homo sapiens exosome component Rrp41 (FLJ20591), mRNA                                   |
| NM_018579 | Homo sapiens mitochondrial solute carrier (LOC51312), mRNA                              |
| NM_018485 | Homo sapiens G protein-coupled receptor C5L2 (LOC55868), mRNA                           |
| NM_018479 | Homo sapiens uncharacterized hypothalamus protein HCDASE (LOC55862), mRNA               |
| NM_018447 | Homo sapiens 30 kDa protein (LOC55831), mRNA  |
| NM_018443 | Homo sapiens zinc finger protein 302 (ZNF302), mRNA                                     |
| NM_018430 | Homo sapiens hypothetical protein (LOC55815), mRNA                                      |
| NM_018402 | Homo sapiens interleukin 26 (IL26), mRNA  |
| NM_017692 | Homo sapiens aprataxin (APTX), mRNA   |
| NM_018171 | Homo sapiens hypothetical protein FLJ10659 (FLJ10659), mRNA                             |
| NM_017530 | Homo sapiens hypothetical protein LOC55565 (LOC55565), mRNA                             |
| NM_013385 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 4 (PSCD4), mRNA          |
| NM_016651 | Homo sapiens heptacellular carcinoma novel gene-3 protein (LOC51339), mRNA              |
| NM_016955 | Homo sapiens soluble liver antigen/liver pancreas antigen (LOC51091), mRNA              |
| NM_016422 | Homo sapiens C3HC4-like zinc finger protein (ZFP26), mRNA                               |
| NM_016520 | Homo sapiens hepatocellular carcinoma-associated antigen 59 (LOC51759), mRNA            |
| NM_016275 | Homo sapiens selenoprotein T (LOC51714), mRNA   |
| NM_016242 | Homo sapiens endomucin-2 (LOC51705), mRNA   |
| NM_016233 | Homo sapiens peptidylarginine deiminase type III (LOC51702), mRNA                       |
| NM_016209 | Homo sapiens unknown (LOC51693), mRNA   |



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| NM_016140 | Homo sapiens brain specific protein (LOC51673), mRNA   |
| NM_016107 | Homo sapiens zinc finger RNA binding protein (ZFR), mRNA   |
| NM_016098 | Homo sapiens HSPC040 protein (LOC51660), mRNA  |
| NM_016095 | Homo sapiens HSPC037 protein (LOC51659), mRNA  |
| NM_016086 | Homo sapiens map kinase phosphatase-like protein MK-STYX (LOC51657), mRNA                        |
| NM_016061 | Homo sapiens CGI-127 protein (LOC51646), mRNA  |
| NM_016039 | Homo sapiens CGI-99 protein (LOC51637), mRNA   |
| NM_016029 | Homo sapiens CGI-86 protein (LOC51635), mRNA   |
| NM_016024 | Homo sapiens CGI-79 protein (LOC51634), mRNA   |
| NM_016019 | Homo sapiens CGI-74 protein (LOC51631), mRNA   |
| NM_015964 | Homo sapiens brain specific protein (LOC51673), mRNA   |
| NM_015939 | Homo sapiens CGI-09 protein (LOC51605), mRNA   |
| NM_016647 | Homo sapiens mesenchymal stem cell protein DSCD75 (LOC51337), mRNA                               |
| NM_016646 | Homo sapiens mesenchymal stem cell protein DSCD28 (LOC51336), mRNA                               |
| NM_016632 | Homo sapiens ARF protein (LOC51326), mRNA  |
| NM_016629 | Homo sapiens hypothetical protein (LOC51323), mRNA   |
| NM_016627 | Homo sapiens hypothetical protein (LOC51321), mRNA   |
| NM_016626 | Homo sapiens hypothetical protein (LOC51320), mRNA   |
| NM_016618 | Homo sapiens hypothetical protein (LOC51315), mRNA   |
| NM_016616 | Homo sapiens NM23-H8 (LOC51314), mRNA  |
| NM_016613 | Homo sapiens AD021 protein (LOC51313), mRNA  |
| NM_016612 | Homo sapiens mitochondrial solute carrier (LOC51312), mRNA                                       |
| NM_016594 | Homo sapiens FK506 binding protein precursor (LOC51303), mRNA                                    |
| NM_016562 | Homo sapiens toll-like receptor 7 (TLR7), mRNA   |
| NM_016546 | Homo sapiens complement C1r-like proteinase precursor, (LOC51279), mRNA                          |
| NM_016534 | Homo sapiens apoptosis-related protein PNAS-1 (LOC51275), mRNA                                   |
| NM_016521 | Homo sapiens E2F-like protein (LOC51270), mRNA   |
| NM_016511 | Homo sapiens C-type lectin-like receptor-1 (LOC51267), mRNA                                      |
| NM_016509 | Homo sapiens C-type lectin-like receptor-2 (LOC51266), mRNA                                      |
| NM_016496 | Homo sapiens hypothetical protein (LOC51257), mRNA   |
| NM_016494 | Homo sapiens hypothetical protein (LOC51255), mRNA   |
| NM_016484 | Homo sapiens hypothetical protein (LOC51248), mRNA   |
| NM_016471 | Homo sapiens hypothetical protein (LOC51242), mRNA   |
| NM_016467 | Homo sapiens hypothetical protein (LOC51240), mRNA   |
| NM_016454 | Homo sapiens hypothetical protein (LOC51234), mRNA   |
| NM_016429 | Homo sapiens COPZ2 for nonclathrin coat protein zeta-COP (LOC51226), mRNA                        |
| NM_016383 | Homo sapiens HOM-TES-85 tumor antigen (LOC51213), mRNA   |
| NM_016380 | Homo sapiens differentiation-related protein dif13 (LOC51212), mRNA                              |
| NM_016364 | Homo sapiens protein phosphatase (LOC51207), mRNA  |
| NM_016339 | Homo sapiens Link guanine nucleotide exchange factor II (LOC51195), mRNA                         |
| NM_016338 | Homo sapiens Ran binding protein 11 (LOC51194), mRNA   |
| NM_016331 | Homo sapiens zinc finger protein ANC_2H01 (LOC51193), mRNA                                       |
| NM_016311 | Homo sapiens ATPase inhibitor precursor (LOC51189), mRNA   |
| NM_016256 | Homo sapiens N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase (LOC51172), mRNA |
| NM_016223 | Homo sapiens protein kinase C and casein kinase substrate in neurons 3 (PACSIN3), mRNA           |
| NM_016202 | Homo sapiens LDL induced EC protein (LOC51157), mRNA   |
| NM_016175 | Homo sapiens truncated calcium binding protein (LOC51149), mRNA                                  |
| NM_016162 | Homo sapiens candidate tumor suppressor p33 ING1 homolog (LOC51147), mRNA                        |

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| NM_016158 | Homo sapiens erythrocyte transmembrane protein (LOC51145), mRNA   |
| NM_016142 | Homo sapiens steroid dehydrogenase homolog (LOC51144), mRNA   |
| NM_016141 | Homo sapiens dynein light chain-A (LOC51143), mRNA  |
| NM_016125 | Homo sapiens PTD016 protein (LOC51136), mRNA  |
| NM_016121 | Homo sapiens NY-REN-45 antigen (LOC51133), mRNA   |
| NM_016102 | Homo sapiens tripartite motif-containing 17 (TRIM17), mRNA  |
| NM_016038 | Homo sapiens CGI-97 protein (LOC51119), mRNA  |
| NM_016035 | Homo sapiens CGI-92 protein (LOC51117), mRNA  |
| NM_016026 | Homo sapiens CGI-82 protein (LOC51109), mRNA  |
| NM_016010 | Homo sapiens CGI-62 protein (LOC51101), mRNA  |
| NM_016001 | Homo sapiens CGI-48 protein (LOC51096), mRNA  |
| NM_015996 | Homo sapiens CGI-40 protein (LOC51092), mRNA  |
| NM_015978 | Homo sapiens putative protein-tyrosine kinase (LOC51086), mRNA  |
| NM_015962 | Homo sapiens CGI-35 protein (LOC51077), mRNA  |
| NM_015960 | Homo sapiens CGI-32 protein (LOC51076), mRNA  |
| NM_015957 | Homo sapiens CGI-29 protein (LOC51074), mRNA  |
| NM_015954 | Homo sapiens CGI-26 protein (LOC51071), mRNA  |
| NM_015917 | Homo sapiens glutathione S-transferase subunit 13 homolog (LOC51064), mRNA                                  |
| NM_015913 | Homo sapiens hypothetical protein (LOC51060), mRNA  |
| NM_015912 | Homo sapiens hypothetical protein (LOC51059), mRNA  |
| NM_015911 | Homo sapiens hypothetical protein (LOC51058), mRNA  |
| NM_015907 | Homo sapiens leucine aminopeptidase (LOC51056), mRNA  |
| NM_015883 | Homo sapiens clone 1900 unknown protein (LOC51049), mRNA  |
| NM_015872 | Homo sapiens kruppel-related zinc finger protein hcKrox (LOC51043), mRNA                                    |
| NM_015871 | Homo sapiens zinc finger protein (LOC51042), mRNA   |
| NM_016072 | Homo sapiens CGI-141 protein (LOC51026), mRNA   |
| NM_016068 | Homo sapiens CGI-135 protein (LOC51024), mRNA   |
| NM_016053 | Homo sapiens CGI-116 protein (LOC51019), mRNA   |
| NM_016046 | Homo sapiens homolog of yeast exosomal core protein CSL4 (CSL4), mRNA                                       |
| NM_016042 | Homo sapiens exosome component Rrp40 (RRP40), mRNA  |
| NM_015944 | Homo sapiens CGI-14 protein (LOC51005), mRNA  |
| NM_016060 | Homo sapiens CGI-125 protein (LOC51003), mRNA   |
| NM_016482 | Homo sapiens hepatocellular carcinoma-associated antigen 59 (LOC51759), mRNA                                |
| NM_014681 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 34 (DDX34), mRNA                                  |
| NM_014415 | Homo sapiens zinc finger protein (ZNF-U69274), mRNA   |
| NM_014579 | Homo sapiens zinc transporter (ZIP2), mRNA  |
| NM_014347 | Homo sapiens zinc finger protein (ZF5128), mRNA   |
| NM_007146 | Homo sapiens zinc finger protein 161 (ZNF161), mRNA   |
| NM_006626 | Homo sapiens zinc finger protein with interaction domain (ZID), mRNA  |
| NM_006336 | Homo sapiens ZYG homolog (ZYG), mRNA  |
| NM_006138 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 3 (hematopoietic cell-specific) (MS4A3), mRNA |
| NM_005741 | Homo sapiens zinc finger protein 263 (ZNF263), mRNA   |
| NM_000227 | Homo sapiens laminin, alpha 3 (nicein (150kD), kalinin (165kD), BM600 (150kD), epilegrin) (LAMA3), mRNA     |
| NM_000423 | Homo sapiens keratin 2A (epidermal ichthyosis bullosa of Siemens) (KRT2A), mRNA                             |
| NM_000659 | Homo sapiens autoimmune regulator (autoimmune polyendocrinopathy  |

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|           | candidiasis ectodermal dystrophy) (AIRE), transcript variant 3, mRNA   |
| NM_000658 | Homo sapiens autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE), transcript variant AIRE-2, mRNA |
| NM_000383 | Homo sapiens autoimmune regulator (autoimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE), transcript variant AIRE-1, mRNA |
| NM_003451 | Homo sapiens zinc finger protein 177 (ZNF177), mRNA  |
| NM_003419 | Homo sapiens zinc finger protein 345 (ZNF345), mRNA  |
| NM_003407 | Homo sapiens zinc finger protein 36, C3H type, homolog (mouse) (ZFP36), mRNA   |
| NM_001519 | Homo sapiens BRF1 homolog, subunit of RNA polymerase III transcription initiation factor IIIB (S.cerevisiae) (BRF1), mRNA                  |
| NM_000157 | Homo sapiens glucosidase, beta; acid (includes glucosylceramidase) (GBA), mRNA   |
| NM_057178 | Homo sapiens fring (LOC117584), mRNA   |
| NM_057177 | Homo sapiens amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 19 (ALS2CR19), mRNA                                   |
| NM_058178 | Homo sapiens neuronal pentraxin receptor (NPTXR), transcript variant 2, mRNA   |
| NM_014293 | Homo sapiens neuronal pentraxin receptor (NPTXR), transcript variant 1, mRNA   |
| NM_012223 | Homo sapiens myosin 1B (MYO1B), mRNA   |
| NM_015277 | Homo sapiens neural precursor cell expressed, developmentally down-regulated 4-like (NEDD4L), mRNA   |
| NM_015074 | Homo sapiens kinesin family member 1B (KIF1B), mRNA  |
| NM_032591 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 7 (SLC9A7), mRNA   |
| NM_014208 | Homo sapiens dentin sialophosphoprotein (DSPP), mRNA   |
| NM_014693 | Homo sapiens endothelin converting enzyme 2 (ECE2), mRNA   |
| NM_005461 | Homo sapiens v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian) (MAFB), mRNA   |
| NM_030761 | Homo sapiens wingless-type MMTV integration site family, member 4 (WNT4), mRNA   |
| NM_032642 | Homo sapiens wingless-type MMTV integration site family, member 5B (WNT5B), transcript variant 1, mRNA                                     |
| NM_030775 | Homo sapiens wingless-type MMTV integration site family, member 5B (WNT5B), transcript variant 2, mRNA                                     |
| NM_003392 | Homo sapiens wingless-type MMTV integration site family, member 5A (WNT5A), mRNA   |
| NM_057168 | Homo sapiens wingless-type MMTV integration site family, member 16 (WNT16), transcript variant 1, mRNA                                     |
| NM_016087 | Homo sapiens wingless-type MMTV integration site family, member 16 (WNT16), transcript variant 2, mRNA                                     |
| NM_012101 | Homo sapiens tripartite motif-containing 29 (TRIM29), transcript variant 1, mRNA   |
| NM_058193 | Homo sapiens tripartite motif-containing 29 (TRIM29), transcript variant 2, mRNA   |
| NM_000983 | Homo sapiens ribosomal protein L22 (RPL22), mRNA   |
| NM_058248 | Homo sapiens DNase II-like acid DNase (DLAD), transcript variant 2, mRNA   |
| NM_021233 | Homo sapiens DNase II-like acid DNase (DLAD), transcript variant 1, mRNA   |
| NM_058175 | Homo sapiens collagen, type VI, alpha 2 (COL6A2), transcript variant 2C2a', mRNA   |
| NM_058174 | Homo sapiens collagen, type VI, alpha 2 (COL6A2), transcript variant 2C2a, mRNA  |
| NM_001849 | Homo sapiens collagen, type VI, alpha 2 (COL6A2), transcript variant 2C2, mRNA   |

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|           | mRNA  |
| NM_003312 | Homo sapiens thiosulfate sulfurtransferase (rhodanese) (TST), mRNA  |
| NM_020731 | Homo sapiens dioxin receptor repressor (AHRR), mRNA   |
| NM_053049 | Homo sapiens stresscopin (SPC), mRNA  |
| NM_052834 | Homo sapiens WD repeat domain 7 (WDR7), transcript variant 2, mRNA  |
| NM_015285 | Homo sapiens WD repeat domain 7 (WDR7), transcript variant 1, mRNA  |
| NM_000507 | Homo sapiens fructose-1,6-bisphosphatase 1 (FBP1), mRNA   |
| NM_002581 | Homo sapiens pregnancy-associated plasma protein A (PAPPA), mRNA  |
| NM_000968 | Homo sapiens ribosomal protein L4 (RPL4), mRNA  |
| NM_005061 | Homo sapiens ribosomal protein L3-like (RPL3L), mRNA  |
| NM_030811 | Homo sapiens mitochondrial ribosomal protein S26 (MRPS26), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_022497 | Homo sapiens mitochondrial ribosomal protein S25 (MRPS25), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_053023 | Homo sapiens zinc finger protein homologous to Zfp91 in mouse (ZFP91), mRNA   |
| NM_052826 | Homo sapiens WD repeat domain 6 (WDR6), transcript variant 2, mRNA  |
| NM_052825 | Homo sapiens WD repeat domain 6 (WDR6), transcript variant 3, mRNA  |
| NM_052821 | Homo sapiens WD repeat domain 5 (WDR5), transcript variant 2, mRNA  |
| NM_017588 | Homo sapiens WD repeat domain 5 (WDR5), transcript variant 1, mRNA  |
| NM_052990 | Homo sapiens WD repeat domain 10 (WDR10), transcript variant 4, mRNA  |
| NM_052989 | Homo sapiens WD repeat domain 10 (WDR10), transcript variant 2, mRNA  |
| NM_052985 | Homo sapiens WD repeat domain 10 (WDR10), transcript variant 1, mRNA  |
| NM_018262 | Homo sapiens WD repeat domain 10 (WDR10), transcript variant 3, mRNA  |
| NM_031902 | Homo sapiens mitochondrial ribosomal protein S5 (MRPS5), nuclear gene encoding mitochondrial protein, mRNA                                  |
| NM_015969 | Homo sapiens mitochondrial ribosomal protein S17 (MRPS17), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_016065 | Homo sapiens mitochondrial ribosomal protein S16 (MRPS16), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_031280 | Homo sapiens mitochondrial ribosomal protein S15 (MRPS15), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_022839 | Homo sapiens mitochondrial ribosomal protein S11 (MRPS11), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_016034 | Homo sapiens mitochondrial ribosomal protein S2 (MRPS2), nuclear gene encoding mitochondrial protein, mRNA                                  |
| NM_016070 | Homo sapiens mitochondrial ribosomal protein S23 (MRPS23), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_020191 | Homo sapiens mitochondrial ribosomal protein S22 (MRPS22), nuclear gene encoding mitochondrial protein, mRNA                                |
| NM_018135 | Homo sapiens mitochondrial ribosomal protein S18A (MRPS18A), nuclear gene encoding mitochondrial protein, mRNA                              |
| NM_021996 | Homo sapiens Forssman glycolipid synthetase (FS), mRNA  |
| NM_052815 | Homo sapiens immediate early response 3 (IER3), transcript variant long, mRNA   |
| NM_003897 | Homo sapiens immediate early response 3 (IER3), transcript variant short, mRNA  |
| NM_053013 | Homo sapiens enolase 3, (beta, muscle) (ENO3), transcript variant 2, mRNA   |
| NM_001976 | Homo sapiens enolase 3, (beta, muscle) (ENO3), transcript variant 1, mRNA   |
| NM_048368 | Homo sapiens CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1 (CTDPI), transcript variant FCPIb, mRNA |
| NM_004715 | Homo sapiens CTD (carboxy-terminal domain, RNA polymerase II, polypeptide   |

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|           | (SCYC1), mRNA  |
| NM_002477 | Homo sapiens myosin, light polypeptide 5, regulatory (MYL5), mRNA  |
| NM_058253 | Homo sapiens ribosomal protein S6 kinase, 52kD, polypeptide 1 (RPS6KC1), mRNA                                  |
| NM_000623 | Homo sapiens bradykinin receptor B2 (BDKRB2), mRNA   |
| NM_000424 | Homo sapiens keratin 5 (epidermolysis bullosa simplex, Dowling-Meara/Kobner/Weber-Cockayne types) (KRT5), mRNA |
| NM_002272 | Homo sapiens keratin 4 (KRT4), mRNA  |
| NM_057088 | Homo sapiens keratin 3 (KRT3), mRNA  |
| NM_006121 | Homo sapiens keratin 1 (epidermolytic hyperkeratosis) (KRT1), mRNA   |
| NM_057182 | Homo sapiens cyclin E1 (CCNE1), transcript variant 2, mRNA   |
| NM_001238 | Homo sapiens cyclin E1 (CCNE1), transcript variant 1, mRNA   |
| NM_054029 | Homo sapiens chromosome 8 open reading frame 14 (C8orf14), mRNA  |
| NM_054017 | Homo sapiens chromosome 8 open reading frame 12 (C8orf12), mRNA  |
| NM_052936 | Homo sapiens AUT-like 2, cysteine endopeptidase (S. cerevisiae) (AUTL2), mRNA                                  |
| NM_004926 | Homo sapiens zinc finger protein 36, C3H type-like 1 (ZFP36L1), mRNA   |
| NM_006887 | Homo sapiens zinc finger protein 36, C3H type-like 2 (ZFP36L2), mRNA   |
| NM_015355 | Homo sapiens joined to JAZF1 (JIAZ1), mRNA   |
| NM_005642 | Homo sapiens TAF7 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 55 kD (TAF7), mRNA      |
| NM_032685 | Homo sapiens hypothetical protein MGC13005 (MGC13005), mRNA  |
| NM_032656 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 37 (DDX37), mRNA                                     |
| NM_031919 | Homo sapiens cystatin and DUF19 domain containing 1 (CSDUFD1), mRNA  |
| NM_031475 | Homo sapiens espin (ESPN), mRNA  |
| NM_024101 | Homo sapiens melanophilin (MLPH), mRNA   |
| NM_002597 | Homo sapiens phosducin (PDC), transcript variant Phd, mRNA   |
| NM_021201 | Homo sapiens membrane-spanning 4-domains, subfamily A, member 7 (MS4A7), mRNA                                  |
| NM_020634 | Homo sapiens growth differentiation factor 3 (GDF3), mRNA  |
| NM_020185 | Homo sapiens mitogen-activated protein kinase phosphatase x (MKPX), mRNA                                       |
| NM_002897 | Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant scr2, mRNA   |
| NM_016839 | Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant MSSP-2, mRNA |
| NM_016838 | Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant MSSP-1, mRNA |
| NM_016837 | Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant MSSP-3, mRNA |
| NM_016836 | Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant YC1, mRNA    |
| NM_016941 | Homo sapiens delta-like 3 (Drosophila) (DLL3), mRNA  |
| NM_016335 | Homo sapiens proline dehydrogenase (oxidase) 1 (PRODH), mRNA   |
| NM_014122 | Homo sapiens PRO0245 protein (PRO0245), mRNA   |
| NM_015344 | Homo sapiens leptin receptor overlapping transcript-like 1 (LEPROTL1), mRNA                                    |
| NM_014450 | Homo sapiens SHP2 interacting transmembrane adaptor (SIT), mRNA  |
| NM_007159 | Homo sapiens sarcolemma associated protein (SLMAP), mRNA   |
| NM_005974 | Homo sapiens proline dehydrogenase (oxidase) 1 (PRODH), mRNA   |
| NM_004974 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 2 (KCNA2), mRNA                 |
| NM_003195 | Homo sapiens transcription elongation factor A (SII), 2 (TCEA2), mRNA  |

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| NM_001010 | Homo sapiens ribosomal protein S6 (RPS6), mRNA  |
| NM_000981 | Homo sapiens ribosomal protein L19 (RPL19), mRNA  |
| NM_003378 | Homo sapiens VGF nerve growth factor inducible (VGF), mRNA  |
| NM_001612 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 1, mRNA                                    |
| NM_020115 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 11, mRNA                                   |
| NM_020114 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 9, mRNA                                    |
| NM_020113 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 8, mRNA                                    |
| NM_020112 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 7, mRNA                                    |
| NM_020111 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 6, mRNA                                    |
| NM_020110 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 10, mRNA                                   |
| NM_020109 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 5, mRNA                                    |
| NM_020108 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 4, mRNA                                    |
| NM_020107 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 3, mRNA                                    |
| NM_020069 | Homo sapiens acrosomal vesicle protein 1 (ACRV1), transcript variant 2, mRNA                                    |
| NM_022909 | Homo sapiens centromere protein H (CENPH), mRNA   |
| NM_021734 | Homo sapiens solute carrier family 25 (mitochondrial deoxynucleotide carrier), member 19 (SLC25A19), mRNA       |
| NM_021259 | Homo sapiens transmembrane protein 8 (five membrane-spanning domains) (TMEM8), mRNA                             |
| NM_020139 | Homo sapiens oxidoreductase UCPA (LOC56898), mRNA   |
| NM_015975 | Homo sapiens TAF9-like RNA polymerase II, TATA box binding protein (TBP)-associated factor, 31 kD (TAF9L), mRNA |
| NM_013271 | Homo sapiens proprotein convertase subtilisin/kexin type 1 inhibitor (PCSK1N), mRNA                             |
| NM_000904 | Homo sapiens NAD(P)H dehydrogenase, quinone 2 (NQO2), mRNA  |
| NM_000903 | Homo sapiens NAD(P)H dehydrogenase, quinone 1 (NQO1), mRNA  |
| NM_002959 | Homo sapiens sortilin 1 (SORT1), mRNA   |
| NM_057170 | Homo sapiens G protein-coupled receptor kinase-interactor 2 (GIT2), transcript variant 2, mRNA                  |
| NM_057169 | Homo sapiens G protein-coupled receptor kinase-interactor 2 (GIT2), transcript variant 1, mRNA                  |
| NM_057161 | Homo sapiens testis intracellular mediator protein (PEAS), mRNA   |
| NM_057167 | Homo sapiens collagen, type VI, alpha 3 (COL6A3), transcript variant 5, mRNA                                    |
| NM_057166 | Homo sapiens collagen, type VI, alpha 3 (COL6A3), transcript variant 4, mRNA                                    |
| NM_057165 | Homo sapiens collagen, type VI, alpha 3 (COL6A3), transcript variant 3, mRNA                                    |
| NM_057164 | Homo sapiens collagen, type VI, alpha 3 (COL6A3), transcript variant 2, mRNA                                    |
| NM_014776 | Homo sapiens G protein-coupled receptor kinase-interactor 2 (GIT2), transcript variant 3, mRNA                  |
| NM_004369 | Homo sapiens collagen, type VI, alpha 3 (COL6A3), transcript variant 1, mRNA                                    |
| NM_001183 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump), subunit 1 (ATP6S1), mRNA    |
| NM_000675 | Homo sapiens adenosine A2a receptor (ADORA2A), mRNA   |
| NM_033027 | Homo sapiens AXIN1 up-regulated (AXUD1), mRNA   |
| NM_002539 | Homo sapiens ornithine decarboxylase 1 (ODC1), mRNA   |
| NM_058004 | Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA), transcript variant 2, mRNA   |
| NM_000992 | Homo sapiens ribosomal protein L29 (RPL29), mRNA  |
| NM_000984 | Homo sapiens ribosomal protein L23a (RPL23A), mRNA  |
| NM_001289 | Homo sapiens chloride intracellular channel 2 (CLIC2), mRNA   |
| NM_018648 | Homo sapiens nucleolar protein family A, member 3 (H/ACA small nucleolar  |

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|           | RNPs) (NOLA3), mRNA  |
| NM_021947 | Homo sapiens serine racemase (SRR), mRNA   |
| NM_016579 | Homo sapiens 8D6 antigen (8D6A), mRNA  |
| NM_006849 | Homo sapiens protein disulfide isomerase, pancreatic (PDIP), mRNA  |
| NM_002650 | Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA), transcript variant 1, mRNA                              |
| NM_000988 | Homo sapiens ribosomal protein L27 (RPL27), mRNA   |
| NM_000987 | Homo sapiens ribosomal protein L26 (RPL26), mRNA   |
| NM_000986 | Homo sapiens ribosomal protein L24 (RPL24), mRNA   |
| NM_031964 | Homo sapiens keratin associated protein 17.1 (KAP17.1), mRNA   |
| NM_000420 | Homo sapiens Kell blood group (KEL), mRNA  |
| NM_052841 | Homo sapiens serine/threonine kinase 22C (spermiogenesis associated) (STK22C), mRNA  |
| NM_017647 | Homo sapiens FtsJ homolog 3 (E. coli) (FTSJ3), mRNA  |
| NM_001845 | Homo sapiens collagen, type IV, alpha 1 (COL4A1), mRNA   |
| NM_016508 | Homo sapiens cyclin-dependent kinase-like 3 (CDKL3), mRNA  |
| NM_001261 | Homo sapiens cyclin-dependent kinase 9 (CDC2-related kinase) (CDK9), mRNA  |
| NM_033131 | Homo sapiens wingless-type MMTV integration site family, member 3A (WNT3A), mRNA   |
| NM_030753 | Homo sapiens wingless-type MMTV integration site family, member 3 (WNT3), mRNA   |
| NM_003396 | Homo sapiens wingless-type MMTV integration site family, member 15 (WNT15), mRNA   |
| NM_004626 | Homo sapiens wingless-type MMTV integration site family, member 11 (WNT11), mRNA   |
| NM_057176 | Homo sapiens barttin (BSND), mRNA  |
| NM_012079 | Homo sapiens diacylglycerol O-acyltransferase homolog 1 (mouse) (DGAT1), mRNA  |
| NM_005490 | Homo sapiens SH2 domain-containing 3A (SH2D3A), mRNA   |
| NM_032563 | Homo sapiens epidermal differentiation complex protein like protein (LEP16), mRNA  |
| NM_014914 | Homo sapiens centaurin, gamma 2 (CENTG2), mRNA   |
| NM_014161 | Homo sapiens mitochondrial ribosomal protein L18 (MRPL18), mRNA  |
| NM_004895 | Homo sapiens cold autoinflammatory syndrome 1 (CIAS1), mRNA  |
| NM_000086 | Homo sapiens ceroid-lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeyer-Vogt disease) (CLN3), mRNA                                    |
| NM_033341 | Homo sapiens baculoviral IAP repeat-containing 8 (BIRC8), mRNA   |
| NM_054013 | Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isoenzyme B (MGAT4B), transcript variant 2, mRNA |
| NM_000449 | Homo sapiens regulatory factor X, 5 (influences HLA class II expression) (RFX5), mRNA  |
| NM_054025 | Homo sapiens beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase P) (B3GAT1), transcript variant 2, mRNA                             |
| NM_002628 | Homo sapiens profilin 2 (PFN2), transcript variant 2, mRNA   |
| NM_053024 | Homo sapiens profilin 2 (PFN2), transcript variant 1, mRNA   |
| NM_003930 | Homo sapiens src family associated phosphoprotein 2 (SCAP2), mRNA  |
| NM_014018 | Homo sapiens mitochondrial ribosomal protein S28 (MRPS28), nuclear gene encoding mitochondrial protein, mRNA                               |
| NM_015971 | Homo sapiens mitochondrial ribosomal protein S7 (MRPS7), nuclear gene encoding mitochondrial protein, mRNA                                 |
| NM_032476 | Homo sapiens mitochondrial ribosomal protein S6 (MRPS6), nuclear gene  |

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|           | encoding mitochondrial protein, mRNA  |
| NM_018141 | Homo sapiens mitochondrial ribosomal protein S10 (MRPS10), nuclear gene encoding mitochondrial protein, mRNA    |
| NM_014046 | Homo sapiens mitochondrial ribosomal protein S18B (MRPS18B), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_006513 | Homo sapiens seryl-tRNA synthetase (SARS), mRNA   |
| NM_021153 | Homo sapiens cadherin 19, type 2 (CDH19), mRNA  |
| NM_033664 | Homo sapiens cadherin 11, type 2, OB-cadherin (osteoblast) (CDH11), transcript variant 2, mRNA                  |
| NM_001797 | Homo sapiens cadherin 11, type 2, OB-cadherin (osteoblast) (CDH11), transcript variant 1, mRNA                  |
| NM_033381 | Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), transcript variant 3, mRNA                  |
| NM_033380 | Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), transcript variant 2, mRNA                  |
| NM_000495 | Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), transcript variant 1, mRNA                  |
| NM_000092 | Homo sapiens collagen, type IV, alpha 4 (COL4A4), mRNA  |
| NM_033184 | Homo sapiens keratin associated protein 2.4 (KAP2.4), mRNA  |
| NM_032014 | Homo sapiens mitochondrial ribosomal protein S24 (MRPS24), nuclear gene encoding mitochondrial protein, mRNA    |
| NM_001006 | Homo sapiens ribosomal protein S3A (RPS3A), mRNA  |
| NM_012411 | Homo sapiens protein tyrosine phosphatase, non-receptor type 22 (lymphoid) (PTPN22), transcript variant 2, mRNA |
| NM_015967 | Homo sapiens protein tyrosine phosphatase, non-receptor type 22 (lymphoid) (PTPN22), transcript variant 1, mRNA |
| NM_006310 | Homo sapiens aminopeptidase puromycin sensitive (NPEPPS), mRNA  |
| NM_033335 | Homo sapiens nuclear receptor subfamily 6, group A, member 1 (NR6A1), transcript variant 3, mRNA                |
| NM_033334 | Homo sapiens nuclear receptor subfamily 6, group A, member 1 (NR6A1), transcript variant 1, mRNA                |
| NM_001489 | Homo sapiens nuclear receptor subfamily 6, group A, member 1 (NR6A1), transcript variant 2, mRNA                |
| NM_001606 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 2 (ABCA2), mRNA                                  |
| NM_002284 | Homo sapiens keratin, hair, basic, 6 (monilethrix) (KRTHB6), mRNA   |
| NM_002283 | Homo sapiens keratin, hair, basic, 5 (KRTHB5), mRNA   |
| NM_002282 | Homo sapiens keratin, hair, basic, 3 (KRTHB3), mRNA   |
| NM_033033 | Homo sapiens keratin, hair, basic, 2 (KRTHB2), mRNA   |
| NM_002281 | Homo sapiens keratin, hair, basic, 1 (KRTHB1), mRNA   |
| NM_033045 | Homo sapiens keratin, hair, basic, 4 (KRTHB4), mRNA   |
| NM_001011 | Homo sapiens ribosomal protein S7 (RPS7), mRNA  |
| NM_000980 | Homo sapiens ribosomal protein L18a (RPL18A), mRNA  |
| NM_000979 | Homo sapiens ribosomal protein L18 (RPL18), mRNA  |
| NM_000977 | Homo sapiens ribosomal protein L13 (RPL13), transcript variant 1, mRNA  |
| NM_033251 | Homo sapiens ribosomal protein L13 (RPL13), transcript variant 2, mRNA  |
| NM_000976 | Homo sapiens ribosomal protein L12 (RPL12), mRNA  |
| NM_000975 | Homo sapiens ribosomal protein L11 (RPL11), mRNA  |
| NM_000894 | Homo sapiens luteinizing hormone beta polypeptide (LHB), mRNA   |
| NM_005082 | Homo sapiens zinc finger protein 147 (estrogen-responsive finger protein) (ZNF147), mRNA                        |
| NM_003549 | Homo sapiens hyaluronoglucosaminidase 3 (HYAL3), mRNA   |



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| NM_033181 | Homo sapiens cannabinoid receptor 1 (brain) (CNR1), transcript variant 3, mRNA  |
| NG_000018 | Homo sapiens genomic type I (acidic) hair keratin gene cluster (KRTHA.1@) on chromosome 17  |
| NM_033151 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 11 (ABCC11), mRNA  |
| NM_006998 | Homo sapiens secretagoin (SECRET), mRNA   |
| NM_006201 | Homo sapiens PCTAIRE protein kinase 1 (PCTK1), transcript variant 1, mRNA   |
| NM_033019 | Homo sapiens PCTAIRE protein kinase 1 (PCTK1), transcript variant 3, mRNA   |
| NM_033018 | Homo sapiens PCTAIRE protein kinase 1 (PCTK1), transcript variant 2, mRNA   |
| NG_000012 | Homo sapiens genomic protocadherin gamma cluster (PCDHG@) on chromosome 5   |
| NM_001023 | Homo sapiens ribosomal protein S20 (RPS20), mRNA  |
| NM_004451 | Homo sapiens estrogen-related receptor alpha (ESRRA), mRNA  |
| NM_005755 | Homo sapiens Epstein-Barr virus induced gene 3 (EBI3), mRNA   |
| NM_001015 | Homo sapiens ribosomal protein S11 (RPS11), mRNA  |
| NM_006923 | Homo sapiens stromal cell-derived factor 2 (SDF2), mRNA   |
| NM_000394 | Homo sapiens crystallin, alpha A (CRYAA), mRNA  |
| NM_003761 | Homo sapiens vesicle-associated membrane protein 8 (endobrevin) (VAMP8), mRNA   |
| NM_031958 | Homo sapiens keratin associated protein 3.1 (KRTAP3.1), mRNA  |
| NM_031957 | Homo sapiens keratin associated protein 1.5 (KRTAP1.5), mRNA  |
| NM_004776 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5 (B4GALT5), mRNA  |
| NM_030587 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 2 (B4GALT2), transcript variant 1, mRNA  |
| NM_003780 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 2 (B4GALT2), transcript variant 2, mRNA  |
| NM_004391 | Homo sapiens cytochrome P450, subfamily VIIIB (sterol 12-alpha-hydroxylase), polypeptide 1 (CYP8B1), mRNA   |
| NM_000785 | Homo sapiens cytochrome P450, subfamily XXVIIIB (25-hydroxyvitamin D-1-alpha-hydroxylase), polypeptide 1 (CYP27B1), mitochondrial protein encoded by nuclear gene, mRNA |
| NM_031419 | Homo sapiens molecule possessing ankyrin repeats induced by lipopolysaccharide (MAIL), homolog of mouse (MAIL), mRNA  |
| NM_000961 | Homo sapiens prostaglandin I2 (prostacyclin) synthase (PTGIS), mRNA   |
| NM_003293 | Homo sapiens tryptase, alpha (TPS1), mRNA   |
| NM_016630 | Homo sapiens acid cluster protein 33 (ACP33), mRNA  |
| NM_014458 | Homo sapiens Kelch motif containing protein (AB026190), mRNA  |
| NM_007207 | Homo sapiens dual specificity phosphatase 10 (DUSP10), mRNA   |
| NM_030660 | Homo sapiens Machado-Joseph disease (spinocerebellar ataxia 3, olivopontocerebellar ataxia 3, autosomal dominant, ataxin 3) (MJD), transcript variant 2, mRNA           |
| NM_022055 | Homo sapiens potassium channel, subfamily K, member 12 (KCNK12), mRNA   |
| NM_021175 | Homo sapiens hepcidin antimicrobial peptide (HAMP), mRNA  |
| NM_018666 | Homo sapiens sarcoma antigen (SAGE), mRNA   |
| NM_016532 | Homo sapiens SKIP for skeletal muscle and kidney enriched inositol phosphatase (LOC51763), mRNA   |
| NM_015987 | Homo sapiens heme binding protein 1 (HEBP1), mRNA   |
| NM_014079 | Homo sapiens Kruppel-like factor 15 (KLF15), mRNA   |
| NM_014759 | Homo sapiens phytanoyl-CoA hydroxylase interacting protein (PHYHIP), mRNA   |

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| NM_002590 | Homo sapiens protocadherin 8 (PCDH8), transcript variant 1, mRNA   |
| NM_004826 | Homo sapiens endothelin converting enzyme-like 1 (ECE1), mRNA  |
| NM_004420 | Homo sapiens dual specificity phosphatase 8 (DUSP8), mRNA  |
| NM_001012 | Homo sapiens ribosomal protein S8 (RPS8), mRNA   |
| NM_002595 | Homo sapiens PCTAIRE protein kinase 2 (PCTK2), mRNA  |
| NM_001395 | Homo sapiens dual specificity phosphatase 9 (DUSP9), mRNA  |
| NM_003887 | Homo sapiens development and differentiation enhancing factor 2 (DDEF2), mRNA                                |
| NM_001446 | Homo sapiens fatty acid binding protein 7, brain (FABP7), mRNA   |
| NM_001259 | Homo sapiens cyclin-dependent kinase 6 (CDK6), mRNA  |
| NM_001760 | Homo sapiens cyclin D3 (CCND3), mRNA   |
| NM_001759 | Homo sapiens cyclin D2 (CCND2), mRNA   |
| NM_001237 | Homo sapiens cyclin A2 (CCNA2), mRNA   |
| NM_057158 | Homo sapiens dual specificity phosphatase 4 (DUSP4) transcript variant 2, mRNA                               |
| NM_001394 | Homo sapiens dual specificity phosphatase 4 (DUSP4), transcript variant 1, mRNA                              |
| NM_052988 | Homo sapiens cyclin-dependent kinase (CDC2-like) 10 (CDK10), transcript variant 3, mRNA                      |
| NM_052987 | Homo sapiens cyclin-dependent kinase (CDC2-like) 10 (CDK10), transcript variant 2, mRNA                      |
| NM_057160 | Homo sapiens artemin (ARTN), transcript variant 3, mRNA  |
| NM_057091 | Homo sapiens artemin (ARTN), transcript variant 2, mRNA  |
| NM_057090 | Homo sapiens artemin (ARTN), transcript variant 4, mRNA  |
| NM_003976 | Homo sapiens artemin (ARTN), transcript variant 1, mRNA  |
| NM_000050 | Homo sapiens argininosuccinate synthetase (ASS), transcript variant 1, mRNA                                  |
| NM_054012 | Homo sapiens argininosuccinate synthetase (ASS), transcript variant 2, mRNA                                  |
| NM_053286 | Homo sapiens aquaporin 6, kidney specific (AQP6), transcript variant 2, mRNA                                 |
| NM_001652 | Homo sapiens aquaporin 6, kidney specific (AQP6), transcript variant 1, mRNA                                 |
| NM_053032 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 8, mRNA                             |
| NM_053031 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 7, mRNA                             |
| NM_053030 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 5, mRNA                             |
| NM_053029 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 4, mRNA                             |
| NM_053028 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 3B, mRNA                            |
| NM_053027 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 3A, mRNA                            |
| NM_053026 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 2, mRNA                             |
| NM_053025 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 1, mRNA                             |
| NM_016497 | Homo sapiens mitochondrial ribosomal protein 64 (MRP64), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_024026 | Homo sapiens mitochondrial ribosomal protein 63 (MRP63), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_021821 | Homo sapiens mitochondrial ribosomal protein S35 (MRPS35), nuclear gene encoding mitochondrial protein, mRNA |
| NM_005965 | Homo sapiens myosin, light polypeptide kinase (MYLK), transcript variant 6, mRNA                             |

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|           | mRNA   |
| NM_016640 | Homo sapiens mitochondrial ribosomal protein S30 (MRPS30), mRNA  |
| NM_053035 | Homo sapiens mitochondrial ribosomal protein S33 (MRPS33), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_016071 | Homo sapiens mitochondrial ribosomal protein S33 (MRPS33), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_031901 | Homo sapiens mitochondrial ribosomal protein S21 (MRPS21), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_018997 | Homo sapiens mitochondrial ribosomal protein S21 (MRPS21), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_033363 | Homo sapiens mitochondrial ribosomal protein S12 (MRPS12), transcript variant 3, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_033362 | Homo sapiens mitochondrial ribosomal protein S12 (MRPS12), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_021144 | Homo sapiens PC4 and SFRS1 interacting protein 1 (PSIP1), mRNA   |
| NM_052953 | Homo sapiens hypothetical protein LRP15 (LRP15), mRNA  |
| NM_033207 | Homo sapiens transmembrane protein HTMP10 (HTMP10), mRNA   |
| NM_030649 | Homo sapiens centaurin, beta 5 (CENTB5), mRNA  |
| NM_023936 | Homo sapiens mitochondrial ribosomal protein S34 (MRPS34), nuclear gene encoding mitochondrial protein, mRNA                         |
| NM_021107 | Homo sapiens mitochondrial ribosomal protein S12 (MRPS12), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_014322 | Homo sapiens opsin 3 (encephalopsin, panopsin) (OPN3), mRNA  |
| NM_001260 | Homo sapiens cyclin-dependent kinase 8 (CDK8), mRNA  |
| NM_003674 | Homo sapiens cyclin-dependent kinase (CDC2-like) 10 (CDK10), transcript variant 1, mRNA  |
| NM_057094 | Homo sapiens crystallin, beta A2 (CRYBA2), transcript variant 3, mRNA  |
| NM_057093 | Homo sapiens crystallin, beta A2 (CRYBA2), transcript variant 2, mRNA  |
| NM_052984 | Homo sapiens cyclin-dependent kinase 4 (CDK4), transcript variant 2, mRNA  |
| NM_000075 | Homo sapiens cyclin-dependent kinase 4 (CDK4), transcript variant 1, mRNA  |
| NM_052827 | Homo sapiens cyclin-dependent kinase 2 (CDK2), transcript variant 2, mRNA  |
| NM_001798 | Homo sapiens cyclin-dependent kinase 2 (CDK2), transcript variant 1, mRNA  |
| NM_006522 | Homo sapiens wingless-type MMTV integration site family, member 6 (WNT6), mRNA   |
| NM_005430 | Homo sapiens wingless-type MMTV integration site family, member 1 (WNT1), mRNA   |
| NM_003394 | Homo sapiens wingless-type MMTV integration site family, member 10B (WNT10B), mRNA   |
| NM_025216 | Homo sapiens wingless-type MMTV integration site family, member 10A (WNT10A), mRNA   |
| NM_005370 | Homo sapiens mel transforming oncogene (derived from cell line NK14)- RAB8 homolog (MEL), mRNA                                       |
| NM_033100 | Homo sapiens MT-protocadherin (KIAA1775), mRNA   |
| NM_005086 | Homo sapiens sarcospan (Kras oncogene-associated gene) (SSPN), mRNA  |
| NM_003737 | Homo sapiens protocadherin 16 (PCDH16), mRNA   |
| NM_018153 | Homo sapiens tumor endothelial marker 8 (TEM8), transcript variant 3, mRNA   |
| NM_053034 | Homo sapiens tumor endothelial marker 8 (TEM8), transcript variant 2, mRNA   |
| NM_005929 | Homo sapiens antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 (MFI2), transcript variant 1, mRNA |
| NM_033316 | Homo sapiens antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 (MFI2), transcript variant 2, mRNA |
| NM_001002 | Homo sapiens ribosomal protein, large, P0 (RPLP0), transcript variant 1, mRNA  |

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| NM_053275 | Homo sapiens ribosomal protein, large, P0 (RPLP0), transcript variant 2, mRNA  |
| NM_054034 | Homo sapiens fibronectin 1 (FN1), transcript variant 2, mRNA   |
| NM_002026 | Homo sapiens fibronectin 1 (FN1), transcript variant 1, mRNA   |
| NM_004460 | Homo sapiens fibroblast activation protein, alpha (FAP), mRNA  |
| NM_000783 | Homo sapiens cytochrome P450, subfamily XXVIA, polypeptide 1 (CYP26A1), transcript variant 1, mRNA   |
| NM_057157 | Homo sapiens cytochrome P450, subfamily XXVIA, polypeptide 1 (CYP26A1), transcript variant 2, mRNA   |
| NM_032211 | Homo sapiens lysyl oxidase-like 4 (LOXL4), mRNA  |
| NM_003395 | Homo sapiens wingless-type MMTV integration site family, member 14 (WNT14), mRNA   |
| NM_033101 | Homo sapiens lectin, galactoside-binding, soluble, 12 (galectin 12) (LGALS12), mRNA  |
| NM_032611 | Homo sapiens protein tyrosine phosphatase type IVA, member 3 (PTP4A3), transcript variant 1, mRNA  |
| NM_007079 | Homo sapiens protein tyrosine phosphatase type IVA, member 3 (PTP4A3), transcript variant 2, mRNA  |
| NM_032208 | Homo sapiens tumor endothelial marker 8 (TEM8), transcript variant 1, mRNA   |
| NM_014644 | Homo sapiens phosphodiesterase 4D interacting protein (myomegalin) (PDE4DIP), mRNA   |
| NM_006551 | Homo sapiens lipophilin B (uteroglobin family member), prostatein-like (LPHB), mRNA  |
| NM_012280 | Homo sapiens FtsJ homolog 1 (E. coli) (FTSJ1), mRNA  |
| NM_005209 | Homo sapiens crystallin, beta A2 (CRYBA2), transcript variant 1, mRNA  |
| NM_007346 | Homo sapiens opioid growth factor receptor (OGFR), mRNA  |
| NM_006552 | Homo sapiens lipophilin A (uteroglobin family member) (LPHA), mRNA   |
| NM_015965 | Homo sapiens cell death-regulatory protein GRIM19 (GRIM19), mRNA   |
| NM_014275 | Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isoenzyme B (MGAT4B), transcript variant 1, mRNA |
| NM_001872 | Homo sapiens carboxypeptidase B2 (plasma, carboxypeptidase U) (CPB2), transcript variant 1, mRNA   |
| NM_016413 | Homo sapiens carboxypeptidase B2 (plasma, carboxypeptidase U) (CPB2), transcript variant 2, mRNA   |
| NM_004632 | Homo sapiens death associated protein 3 (DAP3), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA                    |
| NM_033657 | Homo sapiens death associated protein 3 (DAP3), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA                    |
| NM_001266 | Homo sapiens carboxylesterase 1 (monocyte/macrophage serine esterase 1) (CES1), mRNA   |
| NM_004287 | Homo sapiens golgi SNAP receptor complex member 2 (GOSR2), transcript variant A, mRNA  |
| NM_054022 | Homo sapiens golgi SNAP receptor complex member 2 (GOSR2), transcript variant B, mRNA  |
| NM_002906 | Homo sapiens radixin (RDX), mRNA   |
| NM_001004 | Homo sapiens ribosomal protein, large P2 (RPLP2), mRNA   |
| NM_001003 | Homo sapiens ribosomal protein, large, P1 (RPLP1), mRNA  |
| NM_018644 | Homo sapiens beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase P) (B3GAT1), transcript variant 1, mRNA                             |
| NM_022145 | Homo sapiens leucine zipper protein FKSG14 (FKSG14), mRNA  |
| NM_013363 | Homo sapiens procollagen C-endopeptidase enhancer 2 (PCOLCE2), mRNA  |
| NM_033119 | Homo sapiens naked cuticle homolog 1 (Drosophila) (NKD1), mRNA   |

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| NM_020439 | Homo sapiens calcium/calmodulin-dependent protein kinase IG (CAMK1G), mRNA                                 |
| NM_032158 | Homo sapiens NOL1R2 protein (NOL1R2), mRNA   |
| NM_022470 | Homo sapiens p53 target zinc finger protein (WIG1), mRNA   |
| NM_018044 | Homo sapiens NOL1R protein (NOL1R), mRNA   |
| NM_016262 | Homo sapiens epsilon-tubulin (LOC51175), mRNA  |
| NM_014239 | Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA            |
| NM_002308 | Homo sapiens lectin, galactoside-binding, soluble, 9 (galectin 9) (LGALS9), transcript variant short, mRNA |
| NM_009587 | Homo sapiens lectin, galactoside-binding, soluble, 9 (galectin 9) (LGALS9), transcript variant long, mRNA  |
| NM_001187 | Homo sapiens B melanoma antigen (BAGE), mRNA   |
| NM_022162 | Homo sapiens caspase recruitment domain family, member 15 (CARD15), mRNA                                   |
| NM_014733 | Homo sapiens endosome-associated FYVE-domain protein (ENDOFIN), mRNA                                       |
| NM_013393 | Homo sapiens FtsJ homolog 2 (E. coli) (FTSJ2), mRNA  |
| NM_006440 | Homo sapiens thioredoxin reductase beta (TR), mRNA   |
| NM_005863 | Homo sapiens neuroepithelial cell transforming gene 1 (NET1), mRNA   |
| NM_002119 | Homo sapiens major histocompatibility complex, class II, DO alpha (HLA-DOA), mRNA                          |
| NM_021908 | Homo sapiens suppression of tumorigenicity 7 (ST7), transcript variant b, mRNA                             |
| NM_018412 | Homo sapiens suppression of tumorigenicity 7 (ST7), transcript variant a, mRNA                             |
| NM_054020 | Homo sapiens putative ion channel protein CATSPER2 (CATSPER2), mRNA  |
| NM_053281 | Homo sapiens dachshund homolog 2 (Drosophila) (DACH2), mRNA  |
| NM_031439 | Homo sapiens SOX7 transcription factor (SOX7), mRNA  |
| NM_030796 | Homo sapiens hypothetical protein DKFZp564K0822 (DKFZP564K0822), mRNA                                      |
| NM_025117 | Homo sapiens hypothetical protein FLJ11871 (FLJ11871), mRNA  |
| NM_014893 | Homo sapiens KIAA0951 protein (KIAA0951), mRNA   |
| NM_000113 | Homo sapiens dystonia 1, torsion (autosomal dominant; torsin A) (DYT1), mRNA                               |
| NM_053055 | Homo sapiens C-terminal modulator protein (CTMP), mRNA   |
| NM_021212 | Homo sapiens HCF-binding transcription factor Zhangfei (ZF), mRNA  |
| NM_007237 | Homo sapiens SP140 nuclear body protein (SP140), mRNA  |
| NM_006368 | Homo sapiens cAMP responsive element binding protein 3 (luman) (CREB3), mRNA                               |
| NM_005759 | Homo sapiens abl-interactor 12 (SH3-containing protein) (AIP-1), mRNA                                      |
| NM_052966 | Homo sapiens chromosome 1 open reading frame 24 (C1orf24), mRNA  |
| NM_013247 | Homo sapiens protease, serine, 25 (PRSS25), mRNA   |
| NM_003017 | Homo sapiens splicing factor, arginine/serine-rich 3 (SFRS3), mRNA   |
| NM_006289 | Homo sapiens talin 1 (TLN1), mRNA  |
| NM_000970 | Homo sapiens ribosomal protein L6 (RPL6), mRNA   |
| NM_003973 | Homo sapiens ribosomal protein L14 (RPL14), mRNA   |
| NM_001361 | Homo sapiens dihydroorotate dehydrogenase (DHODH), nuclear gene encoding mitochondrial protein, mRNA       |
| NM_021248 | Homo sapiens cadherin-like 22 (CDH22), mRNA  |
| NM_033224 | Homo sapiens purine-rich element binding protein B (PURB), mRNA  |
| NM_005859 | Homo sapiens purine-rich element binding protein A (PURA), mRNA  |
| NM_005022 | Homo sapiens profilin 1 (PFN1), mRNA   |
| NM_017481 | Homo sapiens ubiquilin 3 (UBQLN3), mRNA  |

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| NM_013444 | Homo sapiens ubiquilin 2 (UBQLN2), mRNA  |
| NM_053067 | Homo sapiens ubiquilin 1 (UBQLN1), transcript variant 2, mRNA  |
| NM_013438 | Homo sapiens ubiquilin 1 (UBQLN1), transcript variant 1, mRNA  |
| NM_032115 | Homo sapiens potassium channel, subfamily K, member 16 (KCNK16), mRNA                                |
| NM_053284 | Homo sapiens WAP, FS, Ig, KU, and NTR-containing protein (WFIKKN), mRNA                              |
| NM_053278 | Homo sapiens G protein-coupled receptor 102 (GPR102), mRNA   |
| NM_053276 | Homo sapiens vitrin (VIT), mRNA  |
| NM_032649 | Homo sapiens glutamate carboxypeptidase-like protein 2 (CPGL2), mRNA                                 |
| NM_053012 | Homo sapiens hypothetical protein (LOC114137), mRNA  |
| NM_003268 | Homo sapiens toll-like receptor 5 (TLR5), mRNA   |
| NM_053005 | Homo sapiens HCCA2 protein (HCCA2), mRNA   |
| NM_052889 | Homo sapiens CARD only protein (COP), mRNA   |
| NM_024740 | Homo sapiens disrupted in bipolar disorder 1 (DIBD1), mRNA   |
| NM_015721 | Homo sapiens gem (nuclear organelle) associated protein 4 (GEMIN4), mRNA                             |
| NM_003730 | Homo sapiens ribonuclease 6 precursor (RNASE6PL), mRNA   |
| NM_030916 | Homo sapiens Ig superfamily receptor LNIR (LNIR), mRNA   |
| NM_022358 | Homo sapiens potassium channel, subfamily K, member 15 (TASK-5) (KCNK15), mRNA                       |
| NM_022576 | Homo sapiens phosducin (PDC), transcript variant PhLOP1, mRNA  |
| NM_018269 | Homo sapiens SIPL protein (SIPL), mRNA   |
| NM_015915 | Homo sapiens spastic paraplegia 3A (autosomal dominant) (SPG3A), mRNA                                |
| NM_053036 | Homo sapiens G protein-coupled receptor 74 (GPR74), mRNA   |
| NM_053016 | Homo sapiens paralectin 2 (PALM2), mRNA  |
| NM_053057 | Homo sapiens hypothetical protein (LOC114138), mRNA  |
| NM_052838 | Homo sapiens septin 1 (SEPT1), mRNA  |
| NM_032034 | Homo sapiens solute carrier family 4, sodium bicarbonate transporter-like, member 11 (SLC4A11), mRNA |
| NM_031899 | Homo sapiens golgi phosphoprotein 5 (GOLPH5), mRNA   |
| NM_018448 | Homo sapiens TBP-interacting protein (TIP120A), mRNA   |
| NM_016952 | Homo sapiens cell adhesion molecule-related/down-regulated by oncogenes (CDON), mRNA                 |
| NM_053050 | Homo sapiens mitochondrial ribosomal protein L53 (MRPL53), mRNA                                      |
| NM_053045 | Homo sapiens hypothetical protein MGC14327 (MGC14327), mRNA  |
| NM_017680 | Homo sapiens asporin (LRR class 1) (ASPN), mRNA  |
| NM_003914 | Homo sapiens cyclin A1 (CCNA1), mRNA   |
| NM_032387 | Homo sapiens protein kinase, lysine deficient 4 (PRKWNK4), mRNA                                      |
| NM_019093 | Homo sapiens UDP glycosyltransferase 1 family, polypeptide A3 (UGT1A3), mRNA                         |
| NM_021027 | Homo sapiens UDP glycosyltransferase 1 family, polypeptide A9 (UGT1A9), mRNA                         |
| NM_019076 | Homo sapiens UDP glycosyltransferase 1 family, polypeptide A8 (UGT1A8), mRNA                         |
| NM_000463 | Homo sapiens UDP glycosyltransferase 1 family, polypeptide A1 (UGT1A1), mRNA                         |
| NM_016608 | Homo sapiens ALEX1 protein (ALEX1), mRNA   |
| NM_016607 | Homo sapiens ALEX3 protein (ALEX3), mRNA   |
| NM_014860 | Homo sapiens SPTF-associated factor 65 gamma (STAF65(gamma)), mRNA                                   |
| NM_014782 | Homo sapiens armadillo repeat protein ALEX2 (ALEX2), mRNA  |
| NM_001072 | Homo sapiens UDP glycosyltransferase 1 family, polypeptide A6 (UGT1A6), mRNA                         |
| NM_000405 | Homo sapiens GM2 ganglioside activator protein (GM2A), mRNA  |

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| NM_001975 | Homo sapiens enolase 2, (gamma, neuronal) (ENO2), mRNA                                  |
| NM_001428 | Homo sapiens enolase 1, (alpha) (ENO1), mRNA  |
| NM_052836 | Homo sapiens cadherin related 23 (CDH23), transcript variant 2, mRNA                    |
| NM_022124 | Homo sapiens cadherin related 23 (CDH23), transcript variant 1, mRNA                    |
| NM_004063 | Homo sapiens cadherin 17, LI cadherin (liver-intestine) (CDH17), mRNA                   |
| NM_004062 | Homo sapiens cadherin 16, KSP-cadherin (CDH16), mRNA                                    |
| NM_004933 | Homo sapiens cadherin 15, M-cadherin (myotubule) (CDH15), mRNA                          |
| NM_001257 | Homo sapiens cadherin 13, H-cadherin (heart) (CDH13), mRNA                              |
| NM_052819 | Homo sapiens caspase recruitment domain protein 14 (CARD14), transcript variant 2, mRNA |
| NM_024110 | Homo sapiens caspase recruitment domain protein 14 (CARD14), transcript variant 1, mRNA |
| NM_032415 | Homo sapiens caspase recruitment domain family, member 11 (CARD11), mRNA                |
| NM_014466 | Homo sapiens tektin 2 (testicular) (TEKT2), mRNA  |
| NM_053006 | Homo sapiens serine/threonine kinase 22B (spermiogenesis associated) (STK22B), mRNA     |
| NM_012083 | Homo sapiens frequently rearranged in advanced T-cell lymphomas 2 (FRAT2), mRNA         |
| NM_006922 | Homo sapiens sodium channel, voltage-gated, type III, alpha polypeptide (SCN3A), mRNA   |
| NM_005347 | Homo sapiens heat shock 70kD protein 5 (glucose-regulated protein, 78kD) (HSPA5), mRNA  |
| NM_003777 | Homo sapiens dynein, axonemal, heavy polypeptide 11 (DNAH11), mRNA                      |
| NM_013282 | Homo sapiens ubiquitin-like, containing PHD and RING finger domains, 1 (UHRF1), mRNA    |
| NM_020886 | Homo sapiens ubiquitin specific protease 28 (USP28), mRNA                               |
| NM_020843 | Homo sapiens zinc finger protein 291 (ZNF291), mRNA                                     |
| NM_024529 | Homo sapiens chromosome 1 open reading frame 28 (C1orf28), mRNA                         |
| NM_053003 | Homo sapiens SIGLEC-like 1 (SIGLECL1), mRNA   |
| NM_033329 | Homo sapiens SIGLEC-like 1 (SIGLECL1), mRNA   |
| NM_015101 | Homo sapiens chromosome 1 open reading frame 17 (C1orf17), mRNA                         |
| NM_032551 | Homo sapiens G protein-coupled receptor 54 (GPR54), mRNA                                |
| NM_031898 | Homo sapiens tektin 3 (TEKT3), mRNA   |
| NM_025191 | Homo sapiens chromosome 1 open reading frame 22 (C1orf22), mRNA                         |
| NM_022755 | Homo sapiens chromosome 9 open reading frame 12 (C9orf12), mRNA                         |
| NM_021104 | Homo sapiens ribosomal protein L41 (RPL41), mRNA  |
| NM_017847 | Homo sapiens chromosome 1 open reading frame 27 (C1orf27), mRNA                         |
| NM_017673 | Homo sapiens chromosome 1 open reading frame 26 (C1orf26), mRNA                         |
| NM_016000 | Homo sapiens mitochondrial CCA-adding tRNA-nucleotidyltransferase (MtCCA), mRNA         |
| NM_015989 | Homo sapiens cysteine sulfinic acid decarboxylase-related protein 2 (CSAD), mRNA        |
| NM_014654 | Homo sapiens syndecan 3 (N-syndecan) (SDC3), mRNA                                       |
| NM_014837 | Homo sapiens chromosome 1 open reading frame 16 (C1orf16), mRNA                         |
| NM_007179 | Homo sapiens insulin-like 6 (INSL6), mRNA   |
| NM_005478 | Homo sapiens insulin-like 5 (INSL5), mRNA   |
| NM_053000 | Homo sapiens TIGA1 (TIGA1), mRNA  |
| NM_052940 | Homo sapiens hypothetical protein MGC8974 (MGC8974), mRNA                               |
| NM_052830 | Homo sapiens gamma-glutamyltransferase-like 3 (GGTL3), mRNA                             |
| NM_053002 | Homo sapiens no opposite paired repeat protein (NOPAR), mRNA                            |
| NM_052998 | Homo sapiens ornithine decarboxylase-like protein (ODC-p), mRNA                         |

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| NM_052996 | Homo sapiens PR domain containing 7 (PRDM7), mRNA                                      |
| NM_052995 | Homo sapiens Usher syndrome 3A (USH3A), mRNA   |
| NM_007110 | Homo sapiens telomerase-associated protein 1 (TEP1), mRNA                              |
| NM_033656 | Homo sapiens WD repeat domain 9 (WDR9), transcript variant 2, mRNA                     |
| NM_018963 | Homo sapiens WD repeat domain 9 (WDR9), transcript variant 1, mRNA                     |
| NM_017818 | Homo sapiens WD repeat domain 8 (WDR8), mRNA   |
| NM_033662 | Homo sapiens WD repeat domain 4 (WDR4), transcript variant 3, mRNA                     |
| NM_033661 | Homo sapiens WD repeat domain 4 (WDR4), transcript variant 2, mRNA                     |
| NM_018669 | Homo sapiens WD repeat domain 4 (WDR4), transcript variant 1, mRNA                     |
| NM_017883 | Homo sapiens WD repeat domain 13 (WDR13), mRNA   |
| NM_052837 | Homo sapiens secretory carrier membrane protein 3 (SCAMP3), transcript variant 2, mRNA |
| NM_005698 | Homo sapiens secretory carrier membrane protein 3 (SCAMP3), transcript variant 1, mRNA |
| NM_005697 | Homo sapiens secretory carrier membrane protein 2 (SCAMP2), mRNA                       |
| NM_004866 | Homo sapiens secretory carrier membrane protein 1 (SCAMP1), transcript variant 1, mRNA |
| NM_052822 | Homo sapiens secretory carrier membrane protein 1 (SCAMP1), transcript variant 2, mRNA |
| NM_052811 | Homo sapiens ret finger protein 2 (RFP2), transcript variant 2, mRNA                   |
| NM_005798 | Homo sapiens ret finger protein 2 (RFP2), transcript variant 1, mRNA                   |
| NM_052817 | Homo sapiens midline 2 (MID2), transcript variant 2, mRNA                              |
| NM_012216 | Homo sapiens midline 2 (MID2), transcript variant 1, mRNA                              |
| NM_000798 | Homo sapiens dopamine receptor D5 (DRD5), mRNA   |
| NM_000794 | Homo sapiens dopamine receptor D1 (DRD1), mRNA   |
| NM_000796 | Homo sapiens dopamine receptor D3 (DRD3), transcript variant a, mRNA                   |
| NM_033663 | Homo sapiens dopamine receptor D3 (DRD3), transcript variant e, mRNA                   |
| NM_033660 | Homo sapiens dopamine receptor D3 (DRD3), transcript variant d, mRNA                   |
| NM_033659 | Homo sapiens dopamine receptor D3 (DRD3), transcript variant c, mRNA                   |
| NM_033658 | Homo sapiens dopamine receptor D3 (DRD3), transcript variant b, mRNA                   |
| NM_004934 | Homo sapiens cadherin 18, type 2 (CDH18), mRNA   |
| NM_004061 | Homo sapiens cadherin 12, type 2 (N-cadherin 2) (CDH12), mRNA                          |
| NM_030622 | Homo sapiens cytochrome P450, subfamily IIS, polypeptide 1 (CYP2S1), mRNA              |
| NM_052831 | Homo sapiens dJ55C23.6 gene (dJ55C23.6), mRNA  |
| NM_052816 | Homo sapiens tripartite motif-containing 31 (TRIM31), transcript variant 2, mRNA       |
| NM_052812 | Homo sapiens tripartite motif-containing 15 (TRIM15), transcript variant 2, mRNA       |
| NM_052955 | Homo sapiens transglutaminase Z (TGM7), mRNA   |
| NM_052957 | Homo sapiens putative nuclear protein (NAAR1), mRNA                                    |
| NM_052851 | Homo sapiens similar to RhoGAP (GT650), mRNA   |
| NM_033229 | Homo sapiens tripartite motif-containing 15 (TRIM15), transcript variant 1, mRNA       |
| NM_018103 | Homo sapiens leucine-rich repeat-containing 5 (LRRC5), mRNA                            |
| NM_014879 | Homo sapiens G protein-coupled receptor 105 (GPR105), mRNA                             |
| NM_000797 | Homo sapiens dopamine receptor D4 (DRD4), mRNA   |
| NM_006596 | Homo sapiens polymerase (DNA directed), theta (POLQ), mRNA                             |
| NM_052972 | Homo sapiens leucine-rich alpha-2-glycoprotein (LRG), mRNA                             |
| NM_052967 | Homo sapiens mas-related G protein-coupled MRG (MRG), mRNA                             |
| NM_052963 | Homo sapiens mitochondrial topoisomerase I (TOP1MT), mRNA                              |
| NM_052962 | Homo sapiens class II cytokine receptor (IL22RA2), mRNA                                |



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| NM_052961 | Homo sapiens solute carrier family 26, member 8 (SLC26A8), mRNA  |
| NM_052958 | Homo sapiens vestibule-1 protein (VEST1), mRNA   |
| NM_052954 | Homo sapiens cysteine and tyrosine-rich protein 1 (CYR1), mRNA   |
| NM_052949 | Homo sapiens RAS guanyl releasing protein 4 (RASGRP4), mRNA  |
| NM_052934 | Homo sapiens solute carrier family 26, member 9 (SLC26A9), mRNA  |
| NM_052933 | Homo sapiens testis specific, 13 (TSGA13), mRNA  |
| NM_052932 | Homo sapiens pro-oncogenic receptor inducing membrane injury gene (PORIMIN), mRNA                            |
| NM_052891 | Homo sapiens peptidoglycan recognition protein-I-alpha precursor (PGLYRP1alpha), mRNA                        |
| NM_052888 | Homo sapiens KIAA0563-related gene (LOC114659), mRNA   |
| NM_052887 | Homo sapiens Toll-interleukin 1 receptor (TIR) domain-containing adapter protein (TIRAP), mRNA               |
| NM_052886 | Homo sapiens mal, T-cell differentiation protein 2 (MAL2), mRNA  |
| NM_052882 | Homo sapiens zinc finger, imprinted 3 (ZIM3), mRNA   |
| NM_052880 | Homo sapiens hypothetical protein MGC17330 (MGC17330), mRNA  |
| NM_052875 | Homo sapiens hypothetical protein MGC10485 (MGC10485), mRNA  |
| NM_052874 | Homo sapiens syntaxin1B2 (STX1B2), mRNA  |
| NM_052863 | Homo sapiens putative cytokine high in normal-1 (HIN-1), mRNA  |
| NM_052862 | Homo sapiens hypothetical protein MGC21854 (MGC21854), mRNA  |
| NM_052861 | Homo sapiens hypothetical protein MGC21675 (MGC21675), mRNA  |
| NM_052853 | Homo sapiens hypothetical protein MGC20727 (MGC20727), mRNA  |
| NM_052848 | Homo sapiens hypothetical protein MGC20255 (MGC20255), mRNA  |
| NM_052845 | Homo sapiens hypothetical protein MGC20496 (MGC20496), mRNA  |
| NM_052842 | Homo sapiens BCL2-like 12 (proline rich) (BCL2L12), mRNA   |
| NM_052818 | Homo sapiens hypothetical gene CG018 (CG018), mRNA   |
| NM_032514 | Homo sapiens microtubule-associated protein 1 light chain 3 alpha (MAP1LC3A), mRNA                           |
| NM_022829 | Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3 (SLC13A3), mRNA |
| NM_018835 | Homo sapiens olfactory receptor, family 1, subfamily K, member 1 (OR1K1), mRNA                               |
| NM_006750 | Homo sapiens syntrophin, beta 2 (dystrophin-associated protein A1, 59kD, basic component 2) (SNTB2), mRNA    |
| NM_033641 | Homo sapiens collagen, type IV, alpha 6 (COL4A6), transcript variant B, mRNA                                 |
| NM_001847 | Homo sapiens collagen, type IV, alpha 6 (COL4A6), transcript variant A, mRNA                                 |
| NM_004359 | Homo sapiens cell division cycle 34 (CDC34), mRNA  |
| NM_033493 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 9, mRNA            |
| NM_033492 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 8, mRNA            |
| NM_033491 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 7, mRNA            |
| NM_033490 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 6, mRNA            |
| NM_033489 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 5, mRNA            |
| NM_033488 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 4, mRNA            |
| NM_033487 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 3, mRNA            |
| NM_033486 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 2, mRNA            |

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|           | transcript variant 2, mRNA  |
| NM_001787 | Homo sapiens cell division cycle 2-like 1 (PITSLRE proteins) (CDC2L1), transcript variant 1, mRNA |
| NM_005983 | Homo sapiens S-phase kinase-associated protein 2 (p45) (SKP2), transcript variant 1, mRNA         |
| NM_032637 | Homo sapiens S-phase kinase-associated protein 2 (p45) (SKP2), transcript variant 2, mRNA         |
| NM_021968 | Homo sapiens H4 histone family, member E (H4FE), mRNA   |
| NM_002748 | Homo sapiens mitogen-activated protein kinase 6 (MAPK6), mRNA                                     |
| NM_003527 | Homo sapiens H2B histone family, member N (H2BFN), mRNA   |
| NM_001000 | Homo sapiens ribosomal protein L39 (RPL39), mRNA  |
| NM_000999 | Homo sapiens ribosomal protein L38 (RPL38), mRNA  |
| NM_000998 | Homo sapiens ribosomal protein L37a (RPL37A), mRNA  |
| NM_000997 | Homo sapiens ribosomal protein L37 (RPL37), mRNA  |
| NM_022054 | Homo sapiens potassium channel, subfamily K, member 13 (KCNK13), mRNA                             |
| NM_021161 | Homo sapiens potassium channel, subfamily K, member 10 (TREK-2) (KCNK10), mRNA                    |
| NM_003944 | Homo sapiens selenium binding protein 1 (SELENBP1), mRNA  |
| NM_033649 | Homo sapiens fibroblast growth factor 18 (FGF18), transcript variant 2, mRNA                      |
| NM_004114 | Homo sapiens fibroblast growth factor 13 (FGF13), transcript variant 1A, mRNA                     |
| NM_033642 | Homo sapiens fibroblast growth factor 13 (FGF13), transcript variant 1B, mRNA                     |
| NM_016279 | Homo sapiens cadherin 9, type 2 (T1-cadherin) (CDH9), mRNA  |
| NM_001796 | Homo sapiens cadherin 8, type 2 (CDH8), mRNA  |
| NM_031891 | Homo sapiens cadherin 20, type 2 (CDH20), mRNA  |
| NM_006727 | Homo sapiens cadherin 10, type 2 (T2-cadherin) (CDH10), mRNA                                      |
| NM_033671 | Homo sapiens cyclin B3 (CCNB3), transcript variant 2, mRNA  |
| NM_033670 | Homo sapiens cyclin B3 (CCNB3), transcript variant 1, mRNA  |
| NM_033379 | Homo sapiens cell division cycle 2, G1 to S and G2 to M (CDC2), transcript variant 2, mRNA        |
| NM_001786 | Homo sapiens cell division cycle 2, G1 to S and G2 to M (CDC2), transcript variant 1, mRNA        |
| NM_004361 | Homo sapiens cadherin 7, type 2 (CDH7), transcript variant b, mRNA                                |
| NM_033646 | Homo sapiens cadherin 7, type 2 (CDH7), transcript variant a, mRNA                                |
| NM_017734 | Homo sapiens palmdelphin (PALMD), mRNA  |
| NM_052832 | Homo sapiens solute carrier family 26, member 7 (SLC26A7), mRNA                                   |
| NM_018718 | Homo sapiens testis specific, 14 (TSGA14), mRNA   |
| NM_015935 | Homo sapiens CGI-01 protein (CGI-01), mRNA  |
| NM_033120 | Homo sapiens naked cuticle homolog 2 (Drosophila) (NKD2), mRNA                                    |
| NM_033031 | Homo sapiens cyclin B3 (CCNB3), transcript variant 3, mRNA  |
| NM_012068 | Homo sapiens activating transcription factor 5 (ATF5), mRNA                                       |
| NM_019617 | Homo sapiens CA11 (LOC56287), mRNA  |
| NM_018398 | Homo sapiens calcium channel, voltage-dependent, alpha 2/delta 3 subunit (CACNA2D3), mRNA         |
| NM_018319 | Homo sapiens tyrosyl-DNA phosphodiesterase (TDP1), mRNA   |
| NM_014404 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 5 (CACNG5), mRNA                   |
| NM_014405 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 4 (CACNG4), mRNA                   |
| NM_012114 | Homo sapiens caspase 14, apoptosis-related cysteine protease (CASP14), mRNA                       |
| NM_006985 | Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA                                |
| NM_006816 | Homo sapiens chromosome 5 open reading frame 8 (C5orf8), mRNA                                     |
| NM_006539 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 3                                  |

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|           | (CACNG3), mRNA  |
| NM_004347 | Homo sapiens caspase 5, apoptosis-related cysteine protease (CASP5), mRNA                 |
| NM_003862 | Homo sapiens fibroblast growth factor 18 (FGF18), transcript variant 1, mRNA              |
| NM_020770 | Homo sapiens cingulin (KIAA1319), mRNA  |
| NM_030778 | Homo sapiens hypothetical protein PRO1331 (PRO1331), mRNA                                 |
| NM_004927 | Homo sapiens mitochondrial ribosomal protein L49 (MRPL49), mRNA                           |
| NM_031962 | Homo sapiens keratin associated protein 9.3 (KRTAP9.3), mRNA                              |
| NM_031961 | Homo sapiens keratin associated protein 9.2 (KRTAP9.2), mRNA                              |
| NM_033456 | Homo sapiens potassium channel, subfamily K, member 7 (KCNK7), transcript variant E, mRNA |
| NM_031854 | Homo sapiens keratin associated protein 4.12 (KRTAP4.12), mRNA                            |
| NM_033455 | Homo sapiens potassium channel, subfamily K, member 7 (KCNK7), transcript variant D, mRNA |
| NM_033348 | Homo sapiens potassium channel, subfamily K, member 7 (KCNK7), transcript variant B, mRNA |
| NM_033347 | Homo sapiens potassium channel, subfamily K, member 7 (KCNK7), transcript variant A, mRNA |
| NM_033191 | Homo sapiens keratin associated protein 9.4 (KAP9.4), mRNA                                |
| NM_033061 | Homo sapiens keratin associated protein 4.7 (KAP4.7), mRNA                                |
| NM_033188 | Homo sapiens keratin associated protein 4.5 (KAP4.5), mRNA                                |
| NM_033062 | Homo sapiens keratin associated protein 4.2 (KAP4.2), mRNA                                |
| NM_033059 | Homo sapiens keratin associated protein 4.14 (KAP4.14), mRNA                              |
| NM_033060 | Homo sapiens keratin associated protein 4.10 (KAP4.10), mRNA                              |
| NM_033643 | Homo sapiens ribosomal protein L36 (RPL36), transcript variant 1, mRNA                    |
| NM_015414 | Homo sapiens ribosomal protein L36 (RPL36), transcript variant 2, mRNA                    |
| NM_007209 | Homo sapiens ribosomal protein L35 (RPL35), mRNA  |
| NM_000996 | Homo sapiens ribosomal protein L35a (RPL35A), mRNA  |
| NM_033637 | Homo sapiens beta-transducin repeat containing (BTRC), transcript variant 1, mRNA         |
| NM_033345 | Homo sapiens regulator of G-protein signalling 8 (RGS8), mRNA                             |
| NM_033543 | Homo sapiens hypothetical protein R29124_1 (R29124_1), mRNA                               |
| NM_033186 | Homo sapiens keratin associated protein 4.13 (KAP4.13), mRNA                              |
| NM_033050 | Homo sapiens G protein-coupled receptor 91 (GPR91), mRNA                                  |
| NM_032728 | Homo sapiens hypothetical protein MGC12921 (MGC12921), mRNA                               |
| NM_032910 | Homo sapiens hypothetical protein MGC14136 (MGC14136), mRNA                               |
| NM_032857 | Homo sapiens mitochondrial ribosomal protein L56 (MRPL56), mRNA                           |
| NM_032640 | Homo sapiens hypothetical protein MGC10526 (MGC10526), mRNA                               |
| NM_032560 | Homo sapiens MSTP033 protein (MSTP033), mRNA  |
| NM_032524 | Homo sapiens keratin associated protein 4.4 (KRTAP4.4), mRNA                              |
| NM_032351 | Homo sapiens mitochondrial ribosomal protein L45 (MRPL45), mRNA                           |
| NM_031963 | Homo sapiens keratin associated protein 9.8 (KRTAP9.8), mRNA                              |
| NM_031432 | Homo sapiens uridine-cytidine kinase 1 (UCK1), mRNA                                       |
| NM_031289 | Homo sapiens hypothetical protein MGC3146 (MGC3146), mRNA                                 |
| NM_031269 | Homo sapiens PRO1386 protein (PRO1386), mRNA  |
| NM_030975 | Homo sapiens keratin associated protein 9.9 (KRTAP9.9), mRNA                              |
| NM_030817 | Homo sapiens hypothetical protein DKFZp434F0318 (DKFZP434F0318), mRNA                     |
| NM_017970 | Homo sapiens hypothetical protein FLJ10008 (FLJ10008), mRNA                               |
| NM_024510 | Homo sapiens hypothetical protein MGC4368 (MGC4368), mRNA                                 |
| NM_024325 | Homo sapiens hypothetical protein MGC10715 (MGC10715), mRNA                               |
| NM_023914 | Homo sapiens G protein-coupled receptor 86 (GPR86), mRNA                                  |
| NM_022915 | Homo sapiens mitochondrial ribosomal protein L44 (MRPL44), mRNA                           |

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| NM_022469 | Homo sapiens hypothetical protein FLJ21195 similar to protein related to DAC and cerberus (FLJ21195), mRNA                     |
| NM_022344 | Homo sapiens protein kinase Njmu-R1 (NJMU-R1), mRNA  |
| NM_002924 | Homo sapiens regulator of G-protein signalling 7 (RGS7), mRNA  |
| NM_020402 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 10 (CHRNA10), mRNA   |
| NM_015420 | Homo sapiens DKFZP564O0463 protein (DKFZP564O0463), mRNA   |
| NM_016355 | Homo sapiens hqp0256 protein (LOC51202), mRNA  |
| NM_020370 | Homo sapiens G protein-coupled receptor 84 (GPR84), mRNA   |
| NM_019016 | Homo sapiens hypothetical protein (FLJ20261), mRNA   |
| NM_017872 | Homo sapiens hypothetical protein FLJ20546 (FLJ20546), mRNA  |
| NM_018373 | Homo sapiens hypothetical protein FLJ11271 (FLJ11271), mRNA  |
| NM_018277 | Homo sapiens hypothetical protein FLJ10932 (FLJ10932), mRNA  |
| NM_018242 | Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA  |
| NM_016055 | Homo sapiens mitochondrial ribosomal protein L48 (MRPL48), mRNA  |
| NM_016468 | Homo sapiens hypothetical protein (LOC51241), mRNA   |
| NM_014099 | Homo sapiens PRO1768 protein (PRO1768), mRNA   |
| NM_014964 | Homo sapiens KIAA1065 protein (KIAA1065), mRNA   |
| NM_014859 | Homo sapiens KIAA0672 gene product (KIAA0672), mRNA  |
| NM_014174 | Homo sapiens HSPC144 protein (HSPC144), mRNA   |
| NM_014156 | Homo sapiens DKFZP564O0463 protein (DKFZP564O0463), mRNA   |
| NM_015544 | Homo sapiens DKFZP564K1964 protein (DKFZP564K1964), mRNA   |
| NM_015681 | Homo sapiens B9 protein (B9), mRNA   |
| NM_012301 | Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA                         |
| NM_006856 | Homo sapiens activating transcription factor 7 (ATF7), mRNA  |
| NM_005714 | Homo sapiens potassium channel, subfamily K, member 7 (KCNK7), transcript variant C, mRNA                                      |
| NM_005756 | Homo sapiens G protein-coupled receptor 64 (GPR64), mRNA   |
| NM_005267 | Homo sapiens gap junction protein, alpha 8, 50kD (connexin 50) (GJA8), mRNA  |
| NM_003457 | Homo sapiens zinc finger protein 207 (ZNF207), mRNA  |
| NM_003184 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, B, 150kD (TAF2B), mRNA                       |
| NM_003079 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1 (SMARCE1), mRNA |
| NM_002815 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA  |
| NM_002577 | Homo sapiens p21 (CDKN1A)-activated kinase 2 (PAK2), mRNA  |
| NM_003867 | Homo sapiens fibroblast growth factor 17 (FGF17), mRNA   |
| NM_003885 | Homo sapiens cyclin-dependent kinase 5, regulatory subunit 1 (p35) (CDK5R1), mRNA  |
| NM_003939 | Homo sapiens beta-transducin repeat containing (BTRC), transcript variant 2, mRNA  |
| NM_001208 | Homo sapiens basic transcription factor 3, like 1 (BTF3L1), mRNA   |
| NM_033500 | Homo sapiens hexokinase 1 (HK1), transcript variant 5, nuclear gene encoding mitochondrial protein, mRNA                       |
| NM_033498 | Homo sapiens hexokinase 1 (HK1), transcript variant 4, nuclear gene encoding mitochondrial protein, mRNA                       |
| NM_033497 | Homo sapiens hexokinase 1 (HK1), transcript variant 3, nuclear gene encoding mitochondrial protein, mRNA                       |
| NM_033496 | Homo sapiens hexokinase 1 (HK1), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA                       |

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| NM_033640 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 6, mRNA   |
| NM_033636 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 5, mRNA   |
| NM_033635 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 4, mRNA   |
| NM_033634 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 3, mRNA   |
| NM_033633 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 2, mRNA   |
| NM_022050 | Homo sapiens SCAN domain-containing 2 (SCAND2), transcript variant 1, mRNA   |
| NM_033467 | Homo sapiens membrane metallo-endopeptidase-like 2 (MMEL2), mRNA   |
| NM_032409 | Homo sapiens PTEN induced putative kinase 1 (PINK1), mRNA  |
| NM_013267 | Homo sapiens breast cell glutaminase (GA), mRNA  |
| NM_004729 | Homo sapiens Ac-like transposable element (ALTE), mRNA   |
| NM_004192 | Homo sapiens acetylserotonin O-methyltransferase-like (ASMTL), mRNA  |
| NM_002115 | Homo sapiens hexokinase 3 (white cell) (HK3), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_000188 | Homo sapiens hexokinase 1 (HK1), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA   |
| NM_004728 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 21 (DDX21), mRNA   |
| NM_022148 | Homo sapiens cytokine receptor-like factor 2 (CRLF2), mRNA   |
| NM_022337 | Homo sapiens RAB38, member RAS oncogene family (RAB38), mRNA   |
| NM_016428 | Homo sapiens NESH protein (NESH), mRNA   |
| NM_016227 | Homo sapiens chromosome 1 open reading frame 9 (C1orf9), mRNA  |
| NM_014283 | Homo sapiens chromosome 1 open reading frame 9 (C1orf9), mRNA  |
| NM_018475 | Homo sapiens TPA regulated locus (TPARL), mRNA   |
| NM_020461 | Homo sapiens gamma-tubulin complex component (GCP6), mRNA  |
| NM_030934 | Homo sapiens chromosome 1 open reading frame 25 (C1orf25), mRNA  |
| NM_030933 | Homo sapiens chromosome 1 open reading frame 14 (C1orf14), mRNA  |
| NM_030769 | Homo sapiens chromosome 1 open reading frame 13 (C1orf13), mRNA  |
| NM_016604 | Homo sapiens chromosome 5 open reading frame 7 (C5orf7), mRNA  |
| NM_016605 | Homo sapiens chromosome 5 open reading frame 6 (C5orf6), mRNA  |
| NM_016603 | Homo sapiens chromosome 5 open reading frame 5 (C5orf5), mRNA  |
| NM_014144 | Homo sapiens chromosome 11 open reading frame 21 (C11orf21), mRNA  |
| NM_033508 | Homo sapiens glucokinase (hexokinase 4, maturity onset diabetes of the young 2) (GCK), transcript variant 3, nuclear gene encoding mitochondrial protein, mRNA |
| NM_033507 | Homo sapiens glucokinase (hexokinase 4, maturity onset diabetes of the young 2) (GCK), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA |
| NM_000162 | Homo sapiens glucokinase (hexokinase 4, maturity onset diabetes of the young 2) (GCK), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA |
| NM_025241 | Homo sapiens UBX domain-containing 1 (UBXD1), mRNA   |
| NM_002098 | Homo sapiens guanylate cyclase activator 1B (retina) (GUCA1B), mRNA  |
| NM_003137 | Homo sapiens SFRS protein kinase 1 (SRPK1), mRNA   |
| NM_003064 | Homo sapiens secretory leukocyte protease inhibitor (antileukoprotease) (SLPI), mRNA   |
| NM_033484 | Homo sapiens F-box only protein 4 (FBXO4), transcript variant 2, mRNA  |

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| NM_012176 | Homo sapiens F-box only protein 4 (FBXO4), transcript variant 1, mRNA  |
| NM_000400 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 2 (xeroderma pigmentosum D) (ERCC2), mRNA |
| NM_014266 | Homo sapiens DNAX-activation protein 10 (DAP10), mRNA  |
| NM_002821 | Homo sapiens PTK7 protein tyrosine kinase 7 (PTK7), mRNA   |
| NM_033502 | Homo sapiens transcriptional regulating protein 132 (TRP-132), transcript variant 1, mRNA  |
| NM_033501 | Homo sapiens transcriptional regulating protein 132 (TRP-132), transcript variant 2, mRNA  |
| NM_018415 | Homo sapiens transcriptional regulating protein 132 (TRP-132), transcript variant 3, mRNA  |
| NM_000994 | Homo sapiens ribosomal protein L32 (RPL32), mRNA   |
| NM_033437 | Homo sapiens phosphodiesterase 5A, cGMP-specific (PDE5A), transcript variant 3, mRNA   |
| NM_033431 | Homo sapiens phosphodiesterase 5A, cGMP-specific (PDE5A), transcript variant 4, mRNA   |
| NM_033430 | Homo sapiens phosphodiesterase 5A, cGMP-specific (PDE5A), transcript variant 2, mRNA   |
| NM_001083 | Homo sapiens phosphodiesterase 5A, cGMP-specific (PDE5A), transcript variant 1, mRNA   |
| NM_000189 | Homo sapiens hexokinase 2 (HK2), mRNA  |
| NM_033185 | Homo sapiens keratin associated protein 3.3 (KAP3.3), mRNA   |
| NM_031959 | Homo sapiens keratin associated protein 3.2 (KRTAP3.2), mRNA   |
| NM_033481 | Homo sapiens F-box only protein 9 (FBXO9), transcript variant 3, mRNA  |
| NM_033480 | Homo sapiens F-box only protein 9 (FBXO9), transcript variant 2, mRNA  |
| NM_012347 | Homo sapiens F-box only protein 9 (FBXO9), transcript variant 1, mRNA  |
| NM_033506 | Homo sapiens F-box only protein 24 (FBXO24), transcript variant 1, mRNA  |
| NM_012172 | Homo sapiens F-box only protein 24 (FBXO24), transcript variant 2, mRNA  |
| NM_012179 | Homo sapiens F-box only protein 7 (FBXO7), mRNA  |
| NM_018438 | Homo sapiens F-box only protein 6 (FBXO6), mRNA  |
| NM_012177 | Homo sapiens F-box only protein 5 (FBXO5), mRNA  |
| NM_032145 | Homo sapiens F-box protein 30 (FBXO30), mRNA   |
| NM_003813 | Homo sapiens a disintegrin and metalloproteinase domain 21 (ADAM21), mRNA  |
| NM_003814 | Homo sapiens a disintegrin and metalloproteinase domain 20 (ADAM20), mRNA  |
| NM_015698 | Homo sapiens T54 protein (T54), mRNA   |
| NM_033222 | Homo sapiens PC4 and SFRS1 interacting protein 2 (PSIP2), mRNA   |
| NM_002887 | Homo sapiens arginyl-tRNA synthetase (RARS), mRNA  |
| NM_033084 | Homo sapiens Fanconi anemia, complementation group D2 (FANCD2), mRNA   |
| NM_014005 | Homo sapiens protocadherin alpha 9 (PCDHA9), transcript variant 2, mRNA  |
| NM_018902 | Homo sapiens protocadherin alpha 11 (PCDHA11), transcript variant 1, mRNA  |
| NM_031882 | Homo sapiens protocadherin alpha subfamily C, 1 (PCDHAC1), transcript variant 2, mRNA  |
| NM_018898 | Homo sapiens protocadherin alpha subfamily C, 1 (PCDHAC1), transcript variant 1, mRNA  |
| NM_031883 | Homo sapiens protocadherin alpha subfamily C, 2 (PCDHAC2), transcript variant 2, mRNA  |
| NM_018899 | Homo sapiens protocadherin alpha subfamily C, 2 (PCDHAC2), transcript variant 1, mRNA  |
| NM_019119 | Homo sapiens protocadherin beta 9 (PCDHB9), mRNA   |
| NM_018916 | Homo sapiens protocadherin gamma subfamily A, 3 (PCDHGA3), transcript  |

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|           | variant 1, mRNA   |
| NM_032704 | Homo sapiens tubulin alpha 6 (TUBA6), mRNA  |
| NM_032407 | Homo sapiens protocadherin gamma subfamily C, 5 (PCDHGC5), transcript variant 2, mRNA |
| NM_018929 | Homo sapiens protocadherin gamma subfamily C, 5 (PCDHGC5), transcript variant 1, mRNA |
| NM_032406 | Homo sapiens protocadherin gamma subfamily C, 4 (PCDHGC4), transcript variant 2, mRNA |
| NM_018928 | Homo sapiens protocadherin gamma subfamily C, 4 (PCDHGC4), transcript variant 1, mRNA |
| NM_032101 | Homo sapiens protocadherin gamma subfamily B, 7 (PCDHGB7), transcript variant 2, mRNA |
| NM_018927 | Homo sapiens protocadherin gamma subfamily B, 7 (PCDHGB7), transcript variant 1, mRNA |
| NM_032099 | Homo sapiens protocadherin gamma subfamily B, 5 (PCDHGB5), transcript variant 2, mRNA |
| NM_018925 | Homo sapiens protocadherin gamma subfamily B, 5 (PCDHGB5), transcript variant 1, mRNA |
| NM_032100 | Homo sapiens protocadherin gamma subfamily B, 6 (PCDHGB6), transcript variant 2, mRNA |
| NM_018926 | Homo sapiens protocadherin gamma subfamily B, 6 (PCDHGB6), transcript variant 1, mRNA |
| NM_032097 | Homo sapiens protocadherin gamma subfamily B, 3 (PCDHGB3), transcript variant 2, mRNA |
| NM_018924 | Homo sapiens protocadherin gamma subfamily B, 3 (PCDHGB3), transcript variant 1, mRNA |
| NM_032096 | Homo sapiens protocadherin gamma subfamily B, 2 (PCDHGB2), transcript variant 2, mRNA |
| NM_018923 | Homo sapiens protocadherin gamma subfamily B, 2 (PCDHGB2), transcript variant 1, mRNA |
| NM_032095 | Homo sapiens protocadherin gamma subfamily B, 1 (PCDHGB1), transcript variant 2, mRNA |
| NM_018922 | Homo sapiens protocadherin gamma subfamily B, 1 (PCDHGB1), transcript variant 1, mRNA |
| NM_032089 | Homo sapiens protocadherin gamma subfamily A, 9 (PCDHGA9), transcript variant 2, mRNA |
| NM_018921 | Homo sapiens protocadherin gamma subfamily A, 9 (PCDHGA9), transcript variant 1, mRNA |
| NM_032088 | Homo sapiens protocadherin gamma subfamily A, 8 (PCDHGA8), transcript variant 1, mRNA |
| NM_014004 | Homo sapiens protocadherin gamma subfamily A, 8 (PCDHGA8), transcript variant 2, mRNA |
| NM_032853 | Homo sapiens hypothetical protein FLJ14868 (FLJ14868), mRNA                           |
| NM_032589 | Homo sapiens Down syndrome critical region gene 8 (DSCR8), mRNA                       |
| NM_032087 | Homo sapiens protocadherin gamma subfamily A, 7 (PCDHGA7), transcript variant 2, mRNA |
| NM_018920 | Homo sapiens protocadherin gamma subfamily A, 7 (PCDHGA7), transcript variant 1, mRNA |
| NM_032086 | Homo sapiens protocadherin gamma subfamily A, 6 (PCDHGA6), transcript variant 2, mRNA |
| NM_018919 | Homo sapiens protocadherin gamma subfamily A, 6 (PCDHGA6), transcript variant 1, mRNA |

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| NM_032054 | Homo sapiens protocadherin gamma subfamily A, 5 (PCDHGA5), transcript variant 2, mRNA   |
| NM_018918 | Homo sapiens protocadherin gamma subfamily A, 5 (PCDHGA5), transcript variant 1, mRNA   |
| NM_032053 | Homo sapiens protocadherin gamma subfamily A, 4 (PCDHGA4), transcript variant 2, mRNA   |
| NM_018917 | Homo sapiens protocadherin gamma subfamily A, 4 (PCDHGA4), transcript variant 1, mRNA   |
| NM_032011 | Homo sapiens protocadherin gamma subfamily A, 3 (PCDHGA3), transcript variant 2, mRNA   |
| NM_032009 | Homo sapiens protocadherin gamma subfamily A, 2 (PCDHGA2), transcript variant 2, mRNA   |
| NM_018915 | Homo sapiens protocadherin gamma subfamily A, 2 (PCDHGA2), transcript variant 1, mRNA   |
| NM_031993 | Homo sapiens protocadherin gamma subfamily A, 1 (PCDHGA1), transcript variant 2, mRNA   |
| NM_032092 | Homo sapiens protocadherin gamma subfamily A, 11 (PCDHGA11), transcript variant 3, mRNA |
| NM_018912 | Homo sapiens protocadherin gamma subfamily A, 1 (PCDHGA1), transcript variant 1, mRNA   |
| NM_032091 | Homo sapiens protocadherin gamma subfamily A, 11 (PCDHGA11), transcript variant 2, mRNA |
| NM_018914 | Homo sapiens protocadherin gamma subfamily A, 11 (PCDHGA11), transcript variant 1, mRNA |
| NM_032090 | Homo sapiens protocadherin gamma subfamily A, 10 (PCDHGA10), transcript variant 2, mRNA |
| NM_018913 | Homo sapiens protocadherin gamma subfamily A, 10 (PCDHGA10), transcript variant 1, mRNA |
| NM_019120 | Homo sapiens protocadherin beta 8 (PCDHB8), mRNA  |
| NM_018940 | Homo sapiens protocadherin beta 7 (PCDHB7), mRNA  |
| NM_018939 | Homo sapiens protocadherin beta 6 (PCDHB6), mRNA  |
| NM_015669 | Homo sapiens protocadherin beta 5 (PCDHB5), mRNA  |
| NM_018938 | Homo sapiens protocadherin beta 4 (PCDHB4), mRNA  |
| NM_018937 | Homo sapiens protocadherin beta 3 (PCDHB3), mRNA  |
| NM_018936 | Homo sapiens protocadherin beta 2 (PCDHB2), mRNA  |
| NM_013340 | Homo sapiens protocadherin beta 1 (PCDHB1), mRNA  |
| NM_020957 | Homo sapiens protocadherin beta 16 (PCDHB16), mRNA                                      |
| NM_018935 | Homo sapiens protocadherin beta 15 (PCDHB15), mRNA                                      |
| NM_018934 | Homo sapiens protocadherin beta 14 (PCDHB14), mRNA                                      |
| NM_018933 | Homo sapiens protocadherin beta 13 (PCDHB13), mRNA                                      |
| NM_018932 | Homo sapiens protocadherin beta 12 (PCDHB12), mRNA                                      |
| NM_018931 | Homo sapiens protocadherin beta 11 (PCDHB11), mRNA                                      |
| NM_018930 | Homo sapiens protocadherin beta 10 (PCDHB10), mRNA                                      |
| NM_031857 | Homo sapiens protocadherin alpha 9 (PCDHA9), transcript variant 1, mRNA                 |
| NM_031856 | Homo sapiens protocadherin alpha 8 (PCDHA8), transcript variant 2, mRNA                 |
| NM_018911 | Homo sapiens protocadherin alpha 8 (PCDHA8), transcript variant 1, mRNA                 |
| NM_031852 | Homo sapiens protocadherin alpha 7 (PCDHA7), transcript variant 2, mRNA                 |
| NM_018910 | Homo sapiens protocadherin alpha 7 (PCDHA7), transcript variant 1, mRNA                 |
| NM_031501 | Homo sapiens protocadherin alpha 5 (PCDHA5), transcript variant 2, mRNA                 |
| NM_018908 | Homo sapiens protocadherin alpha 5 (PCDHA5), transcript variant 1, mRNA                 |
| NM_031500 | Homo sapiens protocadherin alpha 4 (PCDHA4), transcript variant 2, mRNA                 |
| NM_018907 | Homo sapiens protocadherin alpha 4 (PCDHA4), transcript variant 1, mRNA                 |



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| NM_031497 | Homo sapiens protocadherin alpha 3 (PCDHA3), transcript variant 2, mRNA  |
| NM_018906 | Homo sapiens protocadherin alpha 3 (PCDHA3), transcript variant 1, mRNA  |
| NM_031496 | Homo sapiens protocadherin alpha 2 (PCDHA2), transcript variant 3, mRNA  |
| NM_031495 | Homo sapiens protocadherin alpha 2 (PCDHA2), transcript variant 2, mRNA  |
| NM_018905 | Homo sapiens protocadherin alpha 2 (PCDHA2), transcript variant 1, mRNA  |
| NM_031411 | Homo sapiens protocadherin alpha 1 (PCDHA1), transcript variant 3, mRNA  |
| NM_031410 | Homo sapiens protocadherin alpha 1 (PCDHA1), transcript variant 2, mRNA  |
| NM_018900 | Homo sapiens protocadherin alpha 1 (PCDHA1), transcript variant 1, mRNA  |
| NM_031865 | Homo sapiens protocadherin alpha 13 (PCDHA13), transcript variant 2, mRNA  |
| NM_018904 | Homo sapiens protocadherin alpha 13 (PCDHA13), transcript variant 1, mRNA  |
| NM_031849 | Homo sapiens protocadherin alpha 6 (PCDHA6), transcript variant 3, mRNA  |
| NM_031864 | Homo sapiens protocadherin alpha 12 (PCDHA12), transcript variant 2, mRNA  |
| NM_031848 | Homo sapiens protocadherin alpha 6 (PCDHA6), transcript variant 2, mRNA  |
| NM_018903 | Homo sapiens protocadherin alpha 12 (PCDHA12), transcript variant 1, mRNA  |
| NM_031861 | Homo sapiens protocadherin alpha 11 (PCDHA11), transcript variant 2, mRNA  |
| NM_018909 | Homo sapiens protocadherin alpha 6 (PCDHA6), transcript variant 1, mRNA  |
| NM_031860 | Homo sapiens protocadherin alpha 10 (PCDHA10), transcript variant 3, mRNA  |
| NM_031859 | Homo sapiens protocadherin alpha 10 (PCDHA10), transcript variant 2, mRNA  |
| NM_018901 | Homo sapiens protocadherin alpha 10 (PCDHA10), transcript variant 1, mRNA  |
| NM_015429 | Homo sapiens DKFZP586L2024 protein (NESHBP), mRNA  |
| NM_031481 | Homo sapiens solute carrier family 25, (mitochondrial carrier), member 18 (SLC25A18), mRNA                           |
| NM_031442 | Homo sapiens brain cell membrane protein 1 (BCMP1), mRNA   |
| NM_030762 | Homo sapiens basic helix-loop-helix domain containing, class B, 3 (BHLHB3), mRNA                                     |
| NM_023035 | Homo sapiens calcium channel, voltage-dependent, P/Q type, alpha 1A subunit (CACNA1A), transcript variant 2, mRNA    |
| NM_014487 | Homo sapiens nucleolar cysteine-rich protein (HSA6591), mRNA   |
| NM_025239 | Homo sapiens programmed death ligand 2 (PDL2), mRNA  |
| NM_024859 | Homo sapiens hypothetical protein FLJ21687 (FLJ21687), mRNA  |
| NM_000575 | Homo sapiens interleukin 1, alpha (IL1A), mRNA   |
| NM_005348 | Homo sapiens heat shock 90kD protein 1, alpha (HSPCA), mRNA  |
| NM_006900 | Homo sapiens interferon, alpha 13 (IFNA13), mRNA   |
| NM_023067 | Homo sapiens forkhead transcription factor FOXL2 (BPES), mRNA  |
| NM_022552 | Homo sapiens DNA (cytosine-5-)-methyltransferase 3 alpha (DNMT3A), mRNA  |
| NM_022346 | Homo sapiens chromosome condensation protein G (HCAP-G), mRNA  |
| NM_022119 | Homo sapiens protease, serine, 22 (PRSS22), mRNA   |
| NM_022062 | Homo sapiens PBX/knotted 1 homeobox 2 (PKNOX2), mRNA   |
| NM_018665 | Homo sapiens DEAD-box protein (HAGE), mRNA   |
| NM_004614 | Homo sapiens thymidine kinase 2, mitochondrial (TK2), mRNA   |
| NM_020346 | Homo sapiens solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 6 (SLC17A6), mRNA |
| NM_020309 | Homo sapiens solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7 (SLC17A7), mRNA |
| NM_020131 | Homo sapiens chromosome 1 open reading frame 6 (C1orf6), mRNA  |
| NM_017444 | Homo sapiens chromatin accessibility complex 1 (CHRAC1), mRNA  |
| NM_016260 | Homo sapiens zinc finger protein, subfamily 1A, 2 (Helios) (ZNFN1A2), mRNA   |
| NM_015510 | Homo sapiens DKFZP566O084 protein (DKFZp566O084), mRNA   |
| NM_014433 | Homo sapiens rhabdoid tumor deletion region gene 1 (RTDR1), mRNA   |
| NM_014312 | Homo sapiens cortical thymocyte receptor (X. laevis CTX) like (CTXL), mRNA   |
| NM_004539 | Homo sapiens asparaginyl-tRNA synthetase (NARS), mRNA  |
| NM_013284 | Homo sapiens polymerase (DNA directed), mu (POLM), mRNA  |

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| NM_013274 | Homo sapiens polymerase (DNA directed), lambda (POLL), mRNA  |
| NM_003235 | Homo sapiens thyroglobulin (TG), mRNA  |
| NM_001963 | Homo sapiens epidermal growth factor (beta-urogastrone) (EGF), mRNA  |
| NM_007158 | Homo sapiens NRAS-related gene (DIS155E), mRNA   |
| NM_007000 | Homo sapiens uroplakin 1A (UPK1A), mRNA  |
| NM_006947 | Homo sapiens signal recognition particle 72kD (SRP72), mRNA  |
| NM_006892 | Homo sapiens DNA (cytosine-5-)-methyltransferase 3 beta (DNMT3B), mRNA   |
| NM_006760 | Homo sapiens uroplakin 2 (UPK2), mRNA  |
| NM_006691 | Homo sapiens extracellular link domain-containing 1 (XLKD1), mRNA  |
| NM_006572 | Homo sapiens guanine nucleotide binding protein (G protein), alpha 13 (GNA13), mRNA  |
| NM_006494 | Homo sapiens Ets2 repressor factor (ERF), mRNA   |
| NM_006352 | Homo sapiens zinc finger protein 238 (ZNF238), mRNA  |
| NM_006082 | Homo sapiens tubulin, alpha, ubiquitous (K-ALPHA-1), mRNA  |
| NM_005084 | Homo sapiens phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma) (PLA2G7), mRNA                   |
| NM_004999 | Homo sapiens myosin VI (MYO6), mRNA  |
| NM_004937 | Homo sapiens cystinosis, nephropathic (CTNS), mRNA   |
| NM_004212 | Homo sapiens solute carrier family 28 (sodium-coupled nucleoside transporter), member 2 (SLC28A2), mRNA                        |
| NM_004555 | Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3 (NFATC3), mRNA                          |
| NM_004554 | Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4 (NFATC4), mRNA                          |
| NM_000695 | Homo sapiens aldehyde dehydrogenase 3 family, member B2 (ALDH3B2), mRNA  |
| NM_000373 | Homo sapiens uridine monophosphate synthetase (orotate phosphoribosyl transferase and orotidine-5'-decarboxylase) (UMPS), mRNA |
| NM_003332 | Homo sapiens TYRO protein tyrosine kinase binding protein (TYROBP), mRNA   |
| NM_000367 | Homo sapiens thiopurine S-methyltransferase (TPMT), mRNA   |
| NM_001250 | Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5), mRNA  |
| NM_002880 | Homo sapiens v-raf-1 murine leukemia viral oncogene homolog 1 (RAF1), mRNA   |
| NM_003978 | Homo sapiens proline-serine-threonine phosphatase interacting protein 1 (PSTPIP1), mRNA  |
| NM_003627 | Homo sapiens prostate cancer overexpressed gene 1 (POV1), mRNA   |
| NM_002557 | Homo sapiens oviductal glycoprotein 1, 120kD (mucin 9, oviductin) (OVGP1), mRNA  |
| NM_002541 | Homo sapiens oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide) (OGDH), mRNA   |
| NM_000406 | Homo sapiens gonadotropin-releasing hormone receptor (GNRHR), mRNA   |
| NM_001979 | Homo sapiens epoxide hydrolase 2, cytoplasmic (EPHX2), mRNA  |
| NM_001761 | Homo sapiens cyclin F (CCNF), mRNA   |
| NM_001190 | Homo sapiens branched chain aminotransferase 2, mitochondrial (BCAT2), mRNA  |
| NM_000485 | Homo sapiens adenine phosphoribosyltransferase (APRT), mRNA  |
| NM_033514 | Homo sapiens pinch-2 (LOC96626), mRNA  |
| NM_033495 | Homo sapiens KIAA1309 protein (KIAA1309), mRNA   |
| NM_022436 | Homo sapiens ATP-binding cassette, sub-family G (WHITE), member 5 (sterolin 1) (ABCG5), mRNA                                   |

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| NM_016333 | Homo sapiens serine/arginine repetitive matrix 2 (SRRM2), mRNA   |
| NM_012412 | Homo sapiens histone H2A.F/Z variant (H2AV), mRNA  |
| NM_001897 | Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA                              |
| NM_031420 | Homo sapiens mitochondrial ribosomal protein L9 (MRPL9), mRNA  |
| NM_020393 | Homo sapiens hypothetical protein SBB167 (LOC57115), mRNA  |
| NM_015956 | Homo sapiens mitochondrial ribosomal protein L4 (MRPL4), mRNA  |
| NM_004537 | Homo sapiens nucleosome assembly protein 1-like 1 (NAP1L1), mRNA   |
| NM_033504 | Homo sapiens CAC-1 (CAC-1), mRNA   |
| NM_033503 | Homo sapiens Bcl-2 modifying factor (BMF), mRNA  |
| NM_022059 | Homo sapiens chemokine (C-X-C motif) ligand 16 (CXCL16), mRNA  |
| NM_022048 | Homo sapiens casein kinase 1, gamma 1 (CSNK1G1), mRNA  |
| NM_019009 | Homo sapiens Toll-interacting protein (TOLLIP), mRNA   |
| NM_018058 | Homo sapiens cartilage acidic protein 1 (CRTAC1), mRNA   |
| NM_017443 | Homo sapiens polymerase (DNA directed), epsilon 3 (p17 subunit) (POLE3), mRNA                                    |
| NM_007359 | Homo sapiens MLN51 protein (MLN51), mRNA   |
| NM_030956 | Homo sapiens toll-like receptor 10 (TLR10), mRNA   |
| NM_020653 | Homo sapiens zinc finger protein 287 (ZNF287), mRNA  |
| NM_020652 | Homo sapiens zinc finger protein 286 (ZNF286), mRNA  |
| NM_020365 | Homo sapiens eukaryotic translation initiation factor 2B, subunit 3 (gamma, 58kD) (EIF2B3), mRNA                 |
| NM_013432 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 2 (NFKBIL2), mRNA |
| NM_003740 | Homo sapiens potassium channel, subfamily K, member 5 (TASK-2) (KCNK5), mRNA                                     |
| NM_033311 | Homo sapiens potassium inwardly-rectifying channel, subfamily K, member 4 (KCNK4), transcript variant 3, mRNA    |
| NM_033310 | Homo sapiens potassium inwardly-rectifying channel, subfamily K, member 4 (KCNK4), transcript variant 2, mRNA    |
| NM_016611 | Homo sapiens potassium inwardly-rectifying channel, subfamily K, member 4 (KCNK4), transcript variant 1, mRNA    |
| NM_033360 | Homo sapiens v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog (KRAS2), transcript variant a, mRNA          |
| NM_004985 | Homo sapiens v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog (KRAS2), transcript variant b, mRNA          |
| NM_022442 | Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1), transcript variant 3, mRNA                      |
| NM_021988 | Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1), transcript variant 1, mRNA                      |
| NM_003349 | Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1), transcript variant 2, mRNA                      |
| NM_003546 | Homo sapiens H4 histone family, member K (H4FK), mRNA  |
| NM_003541 | Homo sapiens H4 histone family, member D (H4FD), mRNA  |
| NM_003536 | Homo sapiens H3 histone family, member K (H3FK), mRNA  |
| NM_003535 | Homo sapiens H3 histone family, member J (H3FJ), mRNA  |
| NM_003533 | Homo sapiens H3 histone family, member F (H3FF), mRNA  |
| NM_003521 | Homo sapiens H2B histone family, member E (H2BFE), mRNA  |
| NM_003520 | Homo sapiens H2B histone family, member D (H2BFD), mRNA  |
| NM_003519 | Homo sapiens H2B histone family, member C (H2BFC), mRNA  |
| NM_003514 | Homo sapiens H2A histone family, member N (H2AFN), mRNA  |
| NM_003511 | Homo sapiens H2A histone family, member I (H2AFI), mRNA  |

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| NM_005322 | Homo sapiens H1 histone family, member 5 (H1F5), mRNA   |
| NM_021066 | Homo sapiens H2A histone family, member E (H2AFE), mRNA   |
| NM_003510 | Homo sapiens H2A histone family, member D (H2AFD), mRNA   |
| NM_003509 | Homo sapiens H2A histone family, member C (H2AFC), mRNA   |
| NM_033358 | Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), transcript variant E, mRNA     |
| NM_033357 | Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), transcript variant D, mRNA     |
| NM_033356 | Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), transcript variant C, mRNA     |
| NM_033355 | Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), transcript variant B, mRNA     |
| NM_001228 | Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), transcript variant A, mRNA     |
| NM_033340 | Homo sapiens caspase 7, apoptosis-related cysteine protease (CASP7), transcript variant beta, mRNA  |
| NM_033339 | Homo sapiens caspase 7, apoptosis-related cysteine protease (CASP7), transcript variant gamma, mRNA |
| NM_033338 | Homo sapiens caspase 7, apoptosis-related cysteine protease (CASP7), transcript variant delta, mRNA |
| NM_001227 | Homo sapiens caspase 7, apoptosis-related cysteine protease (CASP7), transcript variant alpha, mRNA |
| NM_001005 | Homo sapiens ribosomal protein S3 (RPS3), mRNA  |
| NM_006013 | Homo sapiens ribosomal protein L10 (RPL10), mRNA  |
| NM_013368 | Homo sapiens RPA-binding trans-activator (RBT1), mRNA   |
| NM_002286 | Homo sapiens lymphocyte-activation gene 3 (LAG3), mRNA  |
| NM_005546 | Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA  |
| NM_005538 | Homo sapiens inhibin, beta C (INHBC), mRNA  |
| NM_033257 | Homo sapiens DiGeorge syndrome critical region gene 6 like (DGCR6L), mRNA                           |
| NM_001917 | Homo sapiens D-amino-acid oxidase (DAO), mRNA   |
| NM_001629 | Homo sapiens arachidonate 5-lipoxygenase-activating protein (ALOX5AP), mRNA                         |
| NM_000024 | Homo sapiens adrenergic, beta-2-, receptor, surface (ADRB2), mRNA                                   |
| NM_000683 | Homo sapiens adrenergic, alpha-2C-, receptor (ADRA2C), mRNA   |
| NM_000682 | Homo sapiens adrenergic, alpha-2B-, receptor (ADRA2B), mRNA   |
| NM_000681 | Homo sapiens adrenergic, alpha-2A-, receptor (ADRA2A), mRNA   |
| NM_006179 | Homo sapiens neurotrophin 5 (neurotrophin 4/5) (NTF5), mRNA   |
| NM_033277 | Homo sapiens lacritin (LACRT), mRNA   |
| NM_022128 | Homo sapiens ribokinase (RBSK), mRNA  |
| NM_004823 | Homo sapiens potassium channel, subfamily K, member 6 (TWIK-2) (KCNK6), mRNA                        |
| NM_002246 | Homo sapiens potassium channel, subfamily K, member 3 (TASK-1) (KCNK3), mRNA                        |
| NM_032405 | Homo sapiens transmembrane protease, serine 3 (TMPRSS3), transcript variant D, mRNA                 |
| NM_032404 | Homo sapiens transmembrane protease, serine 3 (TMPRSS3), transcript variant C, mRNA                 |
| NM_032401 | Homo sapiens transmembrane protease, serine 3 (TMPRSS3), transcript variant B, mRNA                 |
| NM_024022 | Homo sapiens transmembrane protease, serine 3 (TMPRSS3), transcript variant A, mRNA                 |

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| NM_016234 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 5 (FACL5), mRNA   |
| NM_006883 | Homo sapiens short stature homeobox (SHOX), transcript variant SHOXb, mRNA  |
| NM_000451 | Homo sapiens short stature homeobox (SHOX), transcript variant SHOXa, mRNA  |
| NM_006476 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit g (ATP5L), mRNA   |
| NM_006356 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit d (ATP5H), mRNA   |
| NM_024683 | Homo sapiens hypothetical protein FLJ22729 (FLJ22729), mRNA   |
| NM_033468 | Homo sapiens zinc finger protein 257 (ZNF257), mRNA   |
| NM_033453 | Homo sapiens inosine triphosphatase (nucleoside triphosphate pyrophosphatase) (ITPA), mRNA  |
| NM_032144 | Homo sapiens RAB6C, member RAS oncogene family (RAB6C), mRNA  |
| NM_031296 | Homo sapiens RAB33B, member RAS oncogene family (RAB33B), mRNA  |
| NM_022570 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 12 (CLECSF12), mRNA                               |
| NM_022825 | Homo sapiens porcupine (MG61), mRNA   |
| NM_022449 | Homo sapiens RAB17, member RAS oncogene family (RAB17), mRNA  |
| NM_016322 | Homo sapiens RAB14, member RAS oncogene family (RAB14), mRNA  |
| NM_006331 | Homo sapiens C2f protein (C2F), mRNA  |
| NM_007066 | Homo sapiens protein kinase (cAMP-dependent, catalytic) inhibitor gamma (PKIG), mRNA  |
| NM_002732 | Homo sapiens protein kinase, cAMP-dependent, catalytic, gamma (PRKACG), mRNA  |
| NM_005055 | Homo sapiens receptor-associated protein of the synapse, 43kD (RAPSN), transcript variant 1, mRNA   |
| NM_032645 | Homo sapiens receptor-associated protein of the synapse, 43kD (RAPSN), transcript variant 2, mRNA   |
| NM_033305 | Homo sapiens chorea acanthocytosis (CHAC), transcript variant A, mRNA   |
| NM_015186 | Homo sapiens chorea acanthocytosis (CHAC), transcript variant B, mRNA   |
| NM_004624 | Homo sapiens vasoactive intestinal peptide receptor 1 (VIPR1), mRNA   |
| NM_030967 | Homo sapiens keratin associated protein 1.1 (KRTAP1.1), mRNA  |
| NM_015696 | Homo sapiens weakly similar to glutathione peroxidase 2 (CL683), mRNA   |
| NM_031885 | Homo sapiens Bardet-Biedl syndrome 2 (BBS2), mRNA   |
| NM_030966 | Homo sapiens keratin associated protein 1.3 (KRTAP1.3), mRNA  |
| NM_007083 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 6 (NUDT6), mRNA  |
| NM_013317 | Homo sapiens lung type-I cell membrane-associated glycoprotein (T1A-2), transcript variant 1, mRNA  |
| NM_006474 | Homo sapiens lung type-I cell membrane-associated glycoprotein (T1A-2), transcript variant 2, mRNA  |
| NM_006275 | Homo sapiens splicing factor, arginine/serine-rich 6 (SFRS6), mRNA  |
| NM_016041 | Homo sapiens CGI-101 protein (F-LAN-1), mRNA  |
| NM_001954 | Homo sapiens discoidin domain receptor family, member 1 (DDR1), transcript variant 2, mRNA  |
| NM_013994 | Homo sapiens discoidin domain receptor family, member 1 (DDR1), transcript variant 3, mRNA  |
| NM_013993 | Homo sapiens discoidin domain receptor family, member 1 (DDR1), transcript variant 1, mRNA  |
| NM_022117 | Homo sapiens cutaneous T-cell lymphoma-associated tumor antigen se20-4; differentially expressed nucleolar TGF-beta1 target protein (DENTT) (SE20-4), |

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|           | mRNA  |
| NM_003048 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 2 (SLC9A2), mRNA                                    |
| NM_001971 | Homo sapiens elastase 1, pancreatic (ELA1), mRNA  |
| NM_033412 | Homo sapiens hypothetical protein similar to CG7943 (MGC14836), mRNA  |
| NM_033420 | Homo sapiens hypothetical protein MGC4022 (R32184_3), mRNA  |
| NM_033408 | Homo sapiens hypothetical protein MBC3205 (MBC3205), mRNA   |
| NM_014395 | Homo sapiens dual adaptor of phosphotyrosine and 3-phosphoinositides (DAPPI), mRNA  |
| NM_003918 | Homo sapiens glycogenin 2 (GYG2), mRNA  |
| NM_001502 | Homo sapiens glycoprotein 2 (zymogen granule membrane) (GP2), mRNA  |
| NM_006362 | Homo sapiens nuclear RNA export factor 1 (NXF1), mRNA   |
| NM_033155 | Homo sapiens nuclear RNA export factor 5 (NXF5), transcript variant 5, mRNA   |
| NM_033154 | Homo sapiens nuclear RNA export factor 5 (NXF5), transcript variant 4, mRNA   |
| NM_033153 | Homo sapiens nuclear RNA export factor 5 (NXF5), transcript variant 3, mRNA   |
| NM_033152 | Homo sapiens nuclear RNA export factor 5 (NXF5), transcript variant 2, mRNA   |
| NM_032946 | Homo sapiens nuclear RNA export factor 5 (NXF5), transcript variant 1, mRNA   |
| NM_022052 | Homo sapiens nuclear RNA export factor 3 (NXF3), mRNA   |
| NM_021808 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 9 (GalNAc-T9) (GALNT9), mRNA      |
| NM_017840 | Homo sapiens mitochondrial ribosomal protein L16 (MRPL16), mRNA   |
| NM_017417 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA      |
| NM_004261 | Homo sapiens 15 kDa selenoprotein (SEP15), mRNA   |
| NM_021998 | Homo sapiens zinc finger protein 6 (CMPX1) (ZNF6), mRNA   |
| NM_004570 | Homo sapiens phosphoinositide-3-kinase, class 2, gamma polypeptide (PIK3C2G), mRNA  |
| NM_002646 | Homo sapiens phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B), mRNA   |
| NM_004598 | Homo sapiens sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) (SPOCK), mRNA                             |
| NM_033135 | Homo sapiens spinal cord-derived growth factor-B (SCDGF-B), transcript variant 2, mRNA  |
| NM_025208 | Homo sapiens spinal cord-derived growth factor-B (SCDGF-B), transcript variant 1, mRNA  |
| NM_033346 | Homo sapiens bone morphogenetic protein receptor, type II (serine/threonine kinase) (BMPR2), transcript variant 2, mRNA       |
| NM_001204 | Homo sapiens bone morphogenetic protein receptor, type II (serine/threonine kinase) (BMPR2), transcript variant 1, mRNA       |
| NM_003933 | Homo sapiens BAI1-associated protein 3 (BAIAP3), mRNA   |
| NM_005467 | Homo sapiens N-acetylated alpha-linked acidic dipeptidase 2 (NAALAD2), mRNA   |
| NM_005944 | Homo sapiens antigen identified by monoclonal antibody MRC OX-2 (MOX2), mRNA  |
| NM_002245 | Homo sapiens potassium channel, subfamily K, member 1 (TWIK-1) (KCNK1), mRNA  |
| NM_005247 | Homo sapiens fibroblast growth factor 3 (murine mammary tumor virus integration site (v-int-2) oncogene homolog) (FGF3), mRNA |
| NM_002006 | Homo sapiens fibroblast growth factor 2 (basic) (FGF2), mRNA  |
| NM_000647 | Homo sapiens chemokine (C-C motif) receptor 2 (CCR2), transcript variant A, mRNA  |
| NM_032047 | Homo sapiens UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase  |

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|           | 5 (B3GNT5), mRNA  |
| NM_014256 | Homo sapiens UDP-GlcNAc:betaGlcNAc beta-1,3-N-acetylglucosaminyltransferase 3 (B3GNT3), mRNA                                  |
| NM_015904 | Homo sapiens translation initiation factor IF2 (IF2), mRNA  |
| NM_005326 | Homo sapiens hydroxyacyl glutathione hydrolase (HAGH), mRNA   |
| NM_013445 | Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA                                   |
| NM_033173 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 (B3GALT5), transcript variant 5, mRNA           |
| NM_033172 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 (B3GALT5), transcript variant 4, mRNA           |
| NM_033171 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 (B3GALT5), transcript variant 3, mRNA           |
| NM_033170 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 (B3GALT5), transcript variant 2, mRNA           |
| NM_033169 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3 (B3GALT3), transcript variant 4, mRNA           |
| NM_033168 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3 (B3GALT3), transcript variant 3, mRNA           |
| NM_033167 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3 (B3GALT3), transcript variant 2, mRNA           |
| NM_003781 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3 (B3GALT3), transcript variant 1, mRNA           |
| NM_003782 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 4 (B3GALT4), mRNA                                 |
| NM_003783 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2 (B3GALT2), mRNA                                 |
| NM_004631 | Homo sapiens low density lipoprotein receptor-related protein 8, apolipoprotein e receptor (LRP8), transcript variant 1, mRNA |
| NM_033300 | Homo sapiens low density lipoprotein receptor-related protein 8, apolipoprotein e receptor (LRP8), transcript variant 2, mRNA |
| NM_017522 | Homo sapiens low density lipoprotein receptor-related protein 8, apolipoprotein e receptor (LRP8), transcript variant 3, mRNA |
| NM_033323 | Homo sapiens sodium bicarbonate transporter 4 (NBC4), transcript variant b, mRNA  |
| NM_033337 | Homo sapiens caveolin 3 (CAV3), transcript variant 1, mRNA  |
| NM_001234 | Homo sapiens caveolin 3 (CAV3), transcript variant 2, mRNA  |
| NM_001233 | Homo sapiens caveolin 2 (CAV2), mRNA  |
| NM_001753 | Homo sapiens caveolin 1, caveolae protein, 22kD (CAV1), mRNA  |
| NM_033291 | Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), transcript variant 2, mRNA  |
| NM_033290 | Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), transcript variant 3, mRNA  |
| NM_033274 | Homo sapiens a disintegrin and metalloproteinase domain 19 (meltrin beta) (ADAM19), transcript variant 2, mRNA                |
| NM_023038 | Homo sapiens a disintegrin and metalloproteinase domain 19 (meltrin beta) (ADAM19), transcript variant 1, mRNA                |
| NM_033308 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 7 (ABCA7), transcript variant 2, mRNA                          |
| NM_019112 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 7 (ABCA7), transcript variant 1, mRNA                          |
| NM_002609 | Homo sapiens platelet-derived growth factor receptor, beta polypeptide  |

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|           | (PDGFRB), mRNA   |
| NM_006206 | Homo sapiens platelet-derived growth factor receptor, alpha polypeptide (PDGFRA), mRNA   |
| NM_033016 | Homo sapiens platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog) (PDGFB), transcript variant 2, mRNA |
| NM_000678 | Homo sapiens adrenergic, alpha-1D-, receptor (ADRA1D), mRNA  |
| NM_000679 | Homo sapiens adrenergic, alpha-1B-, receptor (ADRA1B), mRNA  |
| NM_002675 | Homo sapiens promyelocytic leukemia (PML), transcript variant 6, mRNA  |
| NM_033250 | Homo sapiens promyelocytic leukemia (PML), transcript variant 11, mRNA   |
| NM_033249 | Homo sapiens promyelocytic leukemia (PML), transcript variant 10, mRNA   |
| NM_033247 | Homo sapiens promyelocytic leukemia (PML), transcript variant 8, mRNA  |
| NM_033246 | Homo sapiens promyelocytic leukemia (PML), transcript variant 7, mRNA  |
| NM_033245 | Homo sapiens promyelocytic leukemia (PML), transcript variant 12, mRNA   |
| NM_033244 | Homo sapiens promyelocytic leukemia (PML), transcript variant 5, mRNA  |
| NM_033242 | Homo sapiens promyelocytic leukemia (PML), transcript variant 3, mRNA  |
| NM_033240 | Homo sapiens promyelocytic leukemia (PML), transcript variant 2, mRNA  |
| NM_033239 | Homo sapiens promyelocytic leukemia (PML), transcript variant 9, mRNA  |
| NM_033238 | Homo sapiens promyelocytic leukemia (PML), transcript variant 1, mRNA  |
| NM_033304 | Homo sapiens adrenergic, alpha-1A-, receptor (ADRA1A), transcript variant 4, mRNA  |
| NM_033303 | Homo sapiens adrenergic, alpha-1A-, receptor (ADRA1A), transcript variant 2, mRNA  |
| NM_033302 | Homo sapiens adrenergic, alpha-1A-, receptor (ADRA1A), transcript variant 3, mRNA  |
| NM_033279 | Homo sapiens ring finger protein 22 (RNF22), transcript variant gamma, mRNA  |
| NM_033278 | Homo sapiens ring finger protein 22 (RNF22), transcript variant beta, mRNA   |
| NM_000737 | Homo sapiens chorionic gonadotropin, beta polypeptide (CGB), mRNA  |
| NM_033295 | Homo sapiens caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1), transcript variant epsilon, mRNA,         |
| NM_033294 | Homo sapiens caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1), transcript variant delta, mRNA            |
| NM_033293 | Homo sapiens caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1), transcript variant gamma, mRNA            |
| NM_033292 | Homo sapiens caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1), transcript variant alpha, mRNA            |
| NM_001223 | Homo sapiens caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1), transcript variant beta, mRNA             |
| NM_006771 | Homo sapiens keratin, hair, acidic, 8 (KRTHA8), mRNA   |
| NM_002280 | Homo sapiens keratin, hair, acidic, 5 (KRTHA5), mRNA   |
| NM_000526 | Homo sapiens keratin 14 (epidermolysis bullosa simplex, Dowling-Meara, Koebner) (KRT14), mRNA  |
| NM_033301 | Homo sapiens ribosomal protein L8 (RPL8), transcript variant 2, mRNA   |
| NM_000973 | Homo sapiens ribosomal protein L8 (RPL8), transcript variant 1, mRNA   |
| NM_000661 | Homo sapiens ribosomal protein L9 (RPL9), mRNA   |
| NM_007104 | Homo sapiens ribosomal protein L10a (RPL10A), mRNA   |
| NM_033255 | Homo sapiens epithelial stromal interaction 1 (breast) (EPSTI1), mRNA  |
| NM_021196 | Homo sapiens sodium bicarbonate transporter 4 (NBC4), transcript variant a, mRNA   |
| NM_032241 | Homo sapiens ribosomal protein L10 (RPL10), mRNA   |
| NM_030955 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 12 (ADAMTS12), mRNA                       |
| NM_030765 | Homo sapiens UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase   |



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|           | 4 (B3GNT4), mRNA   |
| NM_014670 | Homo sapiens basic leucine-zipper protein BZAP45 (BZAP45), mRNA  |
| NM_013379 | Homo sapiens dipeptidylpeptidase 7 (DPP7), mRNA  |
| NM_006458 | Homo sapiens ring finger protein 22 (RNF22), transcript variant alpha, mRNA  |
| NM_006057 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 (B3GALT5), transcript variant 1, mRNA                              |
| NM_000648 | Homo sapiens chemokine (C-C motif) receptor 2 (CCR2), transcript variant B, mRNA   |
| NM_000381 | Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), transcript variant 1, mRNA   |
| NM_002645 | Homo sapiens phosphoinositide-3-kinase, class 2, alpha polypeptide (PIK3C2A), mRNA   |
| NM_002608 | Homo sapiens platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog) (PDGFB), transcript variant 1, mRNA |
| NM_001134 | Homo sapiens alpha-fetoprotein (AFP), mRNA   |
| NM_000680 | Homo sapiens adrenergic, alpha-1A-, receptor (ADRA1A), transcript variant 1, mRNA  |
| NM_023929 | Homo sapiens zinc finger protein RINZF (RINZF), mRNA   |
| NM_020353 | Homo sapiens phospholipid scramblase 4 (PLSCR4), mRNA  |
| NM_020359 | Homo sapiens phospholipid scramblase 2 (PLSCR2), mRNA  |
| NM_018494 | Homo sapiens leucine-rich and death domain containing (LRDD), mRNA   |
| NM_004998 | Homo sapiens myosin IE (MYO1E), mRNA   |
| NM_033226 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 12 (ABCC12), mRNA   |
| NM_032105 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12B (PPP1R12B), transcript variant 2, mRNA                                    |
| NM_032104 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12B (PPP1R12B), transcript variant 4, mRNA                                    |
| NM_032103 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12B (PPP1R12B), transcript variant 3, mRNA                                    |
| NM_002481 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12B (PPP1R12B), transcript variant 1, mRNA                                    |
| NM_004689 | Homo sapiens metastasis associated 1 (MTA1), mRNA  |
| NM_006005 | Homo sapiens Wolfram syndrome 1 (wolframin) (WFS1), mRNA   |
| NM_015722 | Homo sapiens calcyon; D1 dopamine receptor-interacting protein (CALCYON), mRNA   |
| NM_004184 | Homo sapiens tryptophanyl-tRNA synthetase (WARS), mRNA   |
| NM_014228 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA  |
| NM_005823 | Homo sapiens mesothelin (MSLN), transcript variant 1, mRNA   |
| NM_013404 | Homo sapiens mesothelin (MSLN), transcript variant 2, mRNA   |
| NM_012341 | Homo sapiens G protein-binding protein CRFG (CRFG), mRNA   |
| NM_002480 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 12A (PPP1R12A), mRNA  |
| NM_003868 | Homo sapiens fibroblast growth factor 16 (FGF16), mRNA   |
| NM_018979 | Homo sapiens protein kinase, lysine deficient 1 (PRKWNK1), mRNA  |
| NM_022127 | Homo sapiens solute carrier family 28 (sodium-coupled nucleoside transporter), member 3 (SLC28A3), mRNA  |
| NM_005517 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA   |
| NM_022465 | Homo sapiens zinc finger protein, subfamily 1A, 4 (Eos) (ZNFN1A4), mRNA  |
| NM_005768 | Homo sapiens putative protein similar to nessy (Drosophila) (C3F), mRNA  |

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| NM_033199 | Homo sapiens stresscopin-related peptide (SRP), mRNA   |
| NM_032243 | Homo sapiens thioredoxin domain-containing 2 (spermatzoa) (TXNDC2), mRNA   |
| NM_031433 | Homo sapiens membrane-type frizzled-related protein (MFRP), mRNA   |
| NM_022466 | Homo sapiens zinc finger protein, subfamily 1A, 5 (Pegasus) (PEGASUS), mRNA  |
| NM_004320 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, cardiac muscle, fast twitch 1 (ATP2A1), mRNA                                   |
| NM_021047 | Homo sapiens zinc finger protein 253 (ZNF253), mRNA  |
| NM_020152 | Homo sapiens chromosome 21 open reading frame 7 (C21orf7), mRNA  |
| NM_017447 | Homo sapiens chromosome 21 open reading frame 91 (C21orf91), mRNA  |
| NM_016154 | Homo sapiens RAB4B, member RAS oncogene family (RAB4B), mRNA   |
| NM_016308 | Homo sapiens UMP-CMP kinase (UMP-CMPK), mRNA   |
| NM_016066 | Homo sapiens glutaredoxin 2 (GLRX2), mRNA  |
| NM_016255 | Homo sapiens family with sequence similarity 8, member A1 (FAM8A1), mRNA   |
| NM_014781 | Homo sapiens likely ortholog of mouse coiled coil forming protein 1 (KIAA0203), mRNA   |
| NM_014468 | Homo sapiens VENT-like homeobox 2 (VENTX2), mRNA   |
| NM_013383 | Homo sapiens transcription factor-like 4 (TCFL4), mRNA   |
| NM_012481 | Homo sapiens zinc finger protein, subfamily 1A, 3 (Aiolos) (ZNFN1A3), mRNA   |
| NM_012230 | Homo sapiens POM (POM121 rat homolog) and ZP3 fusion (POMZP3), mRNA  |
| NM_012199 | Homo sapiens eukaryotic translation initiation factor 2C, 1 (EIF2C1), mRNA   |
| NM_005849 | Homo sapiens immunoglobulin superfamily, member 6 (IGSF6), mRNA  |
| NM_005414 | Homo sapiens SKI-like (SKIL), mRNA   |
| NM_004245 | Homo sapiens transglutaminase 5 (TGM5), mRNA   |
| NM_020831 | Homo sapiens megakaryoblastic leukemia (translocation) 1 (MKL1), mRNA  |
| NM_015870 | Homo sapiens endogenous retrovirus H D1 leader region/integrase-derived ORF1, ORF2, and putative envelope protein (HSU88895), mRNA |
| NM_033330 | Homo sapiens scavenger receptor cysteine-rich type 1 protein M160 precursor (M160), mRNA   |
| NM_033326 | Homo sapiens Sox-6 (HSSOX6), mRNA  |
| NM_017829 | Homo sapiens cat eye syndrome chromosome region, candidate 5 (CECR5), mRNA   |
| NM_033256 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 14A (PPP1R14A), mRNA  |
| NM_033213 | Homo sapiens hypothetical protein MGC12466 (MGC12466), mRNA  |
| NM_033070 | Homo sapiens cat eye syndrome chromosome region, candidate 5 (CECR5), mRNA   |
| NM_032752 | Homo sapiens hypothetical protein MGC15548 (MGC15548), mRNA  |
| NM_032686 | Homo sapiens hypothetical protein MGC13008 (MGC13008), mRNA  |
| NM_032371 | Homo sapiens hypothetical protein MGC15416 (MGC15416), mRNA  |
| NM_032366 | Homo sapiens hypothetical protein MGC13114 (MGC13114), mRNA  |
| NM_032353 | Homo sapiens hypothetical protein MGC10540 (MGC10540), mRNA  |
| NM_032304 | Homo sapiens hypothetical protein MGC2605 (MGC2605), mRNA  |
| NM_032259 | Homo sapiens hypothetical protein DKFZp434F054 (DKFZp434F054), mRNA  |
| NM_032240 | Homo sapiens hypothetical protein FLJ23519 (FLJ23519), mRNA  |
| NM_032153 | Homo sapiens zinc family member 4 protein HZIC4 (ZIC4), mRNA   |
| NM_015064 | Homo sapiens ELKS protein (ELKS), mRNA   |
| NM_031294 | Homo sapiens hypothetical protein DKFZp586M1120 (DKFZp586M1120), mRNA  |
| NM_025213 | Homo sapiens spectrin, beta, non-erythrocytic 4 (SPTBN4), mRNA   |

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| NM_025267 | Homo sapiens hypothetical protein MGC2744 (MGC2744), mRNA  |
| NM_025051 | Homo sapiens hypothetical protein FLJ23022 (FLJ23022), mRNA  |
| NM_024974 | Homo sapiens hypothetical protein FLJ11800 (FLJ11800), mRNA  |
| NM_024934 | Homo sapiens hypothetical protein FLJ22659 (FLJ22659), mRNA  |
| NM_024805 | Homo sapiens hypothetical protein FLJ21172 (FLJ21172), mRNA  |
| NM_024804 | Homo sapiens hypothetical protein FLJ12606 (FLJ12606), mRNA  |
| NM_024052 | Homo sapiens hypothetical protein MGC3048 (MGC3048), mRNA  |
| NM_024042 | Homo sapiens hypothetical protein MGC2601 (MGC2601), mRNA  |
| NM_020535 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 5 (KIR2DL5), mRNA |
| NM_021939 | Homo sapiens hypothetical protein FLJ22041 similar to FK506 binding proteins (FLJ22041), mRNA                |
| NM_020664 | Homo sapiens 2,4-dienoyl CoA reductase 2, peroxisomal (DECR2), mRNA  |
| NM_018722 | Homo sapiens BWRT protein (HSA404617), mRNA  |
| NM_020394 | Homo sapiens zinc finger protein SBZF3 (LOC57116), mRNA  |
| NM_019013 | Homo sapiens hypothetical protein (FLJ10156), mRNA   |
| NM_018629 | Homo sapiens hypothetical protein PRO2533 (PRO2533), mRNA  |
| NM_018568 | Homo sapiens hypothetical protein PRO0943 (PRO0943), mRNA  |
| NM_018050 | Homo sapiens hypothetical protein FLJ10298 (FLJ10298), mRNA  |
| NM_018019 | Homo sapiens hypothetical protein FLJ10193 (FLJ10193), mRNA  |
| NM_017609 | Homo sapiens hypothetical protein DKFZp434A1721 (DKFZp434A1721), mRNA  |
| NM_016332 | Homo sapiens selenoprotein X, 1 (SEPX1), mRNA  |
| NM_016360 | Homo sapiens clone HQ0477 PRO0477p (LOC51204), mRNA  |
| NM_016002 | Homo sapiens CGI-49 protein (LOC51097), mRNA   |
| NM_014913 | Homo sapiens KIAA0863 protein (KIAA0863), mRNA   |
| NM_014700 | Homo sapiens KIAA0665 gene product (KIAA0665), mRNA  |
| NM_014680 | Homo sapiens KIAA0100 gene product (KIAA0100), mRNA  |
| NM_012248 | Homo sapiens selenophosphate synthetase 2 (SPS2), mRNA   |
| NM_007222 | Homo sapiens zinc-fingers and homeoboxes 1 (ZHX1), mRNA  |
| NM_006555 | Homo sapiens SNARE protein (YKT6), mRNA  |
| NM_006623 | Homo sapiens phosphoglycerate dehydrogenase (PHGDH), mRNA  |
| NM_006613 | Homo sapiens GRB2-related adaptor protein (GRAP), mRNA   |
| NM_006659 | Homo sapiens gamma-tubulin complex protein 2 (GCP2), mRNA  |
| NM_016441 | Homo sapiens cysteine-rich motor neuron 1 (CRIM1), mRNA  |
| NM_014787 | Homo sapiens DnaJ (Hsp40) homolog, subfamily C, member 6 (DNAJC6), mRNA                                      |
| NM_004213 | Homo sapiens solute carrier family 28 (sodium-coupled nucleoside transporter), member 1 (SLC28A1), mRNA      |
| NM_003141 | Homo sapiens Sjogren syndrome antigen A1 (52kD, ribonucleoprotein autoantigen SS-A/Ro) (SSA1), mRNA          |
| NM_002607 | Homo sapiens platelet-derived growth factor alpha polypeptide (PDGFA), transcript variant 1, mRNA            |
| NM_033023 | Homo sapiens platelet-derived growth factor alpha polypeptide (PDGFA), transcript variant 2, mRNA            |
| NM_005675 | Homo sapiens DiGeorge syndrome critical region gene 6 (DGCR6), mRNA  |
| NM_016083 | Homo sapiens cannabinoid receptor 1 (brain) (CNR1), transcript variant 2, mRNA                               |
| NM_004053 | Homo sapiens bystin-like (BYSL), mRNA  |
| NG_000016 | Homo sapiens genomic protocadherin alpha cluster (PCDHA@) on chromosome 5                                    |
| NM_032935 | Homo sapiens metallothionein IV (MTIV), mRNA   |

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| NM_003695 | Homo sapiens lymphocyte antigen 6 complex, locus D (E48), mRNA  |
| NM_006787 | Homo sapiens melanoma antigen, family D, 2 (MAGED2), mRNA   |
| NM_016205 | Homo sapiens platelet derived growth factor C (PDGFC), mRNA   |
| NM_017913 | Homo sapiens Hsp90-associating relative of Cdc37 (HARC), mRNA   |
| NM_017701 | Homo sapiens Rho GTPase activating protein 8 (ARHGAP8), mRNA  |
| NM_015366 | Homo sapiens Rho GTPase activating protein 8 (ARHGAP8), mRNA  |
| NM_012269 | Homo sapiens hyaluronoglucosaminidase 4 (HYAL4), mRNA   |
| NM_006207 | Homo sapiens platelet-derived growth factor receptor-like (PDGFRL), mRNA  |
| NM_004986 | Homo sapiens kinectin 1 (kinesin receptor) (KTN1), mRNA   |
| NM_001840 | Homo sapiens cannabinoid receptor 1 (brain) (CNR1), transcript variant 1, mRNA  |
| NM_014417 | Homo sapiens Bcl-2 binding component 3 (BBC3), mRNA   |
| NM_033223 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, gamma 3 (GABRG3), mRNA  |
| NM_005762 | Homo sapiens tripartite motif-containing 28 (TRIM28), mRNA  |
| NM_015906 | Homo sapiens tripartite motif-containing 33 (TRIM33), transcript variant alpha, mRNA  |
| NM_033020 | Homo sapiens tripartite motif-containing 33 (TRIM33), transcript variant beta, mRNA   |
| NM_032421 | Homo sapiens cytoplasmic linker 2 (CYLN2), transcript variant 2, mRNA   |
| NM_031416 | Homo sapiens chromosome 18 open reading frame 2 (C18orf2), mRNA   |
| NM_014412 | Homo sapiens Siah-interacting protein (SIP), mRNA   |
| NM_016212 | Homo sapiens TP53TG3 protein (TP53TG3), mRNA  |
| NM_016552 | Homo sapiens testis specific ankyrin-like protein 1 (LOC51281), mRNA  |
| NM_015369 | Homo sapiens TP53TG3 protein (TP53TG3), mRNA  |
| NM_033284 | Homo sapiens transducin beta-like 1 protein (TBL1Y), mRNA   |
| NM_031951 | Homo sapiens NYD-SP11 protein (NYD-SP11), mRNA  |
| NM_020414 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 24 (DDX24), mRNA  |
| NM_007268 | Homo sapiens Ig superfamily protein (Z391G), mRNA   |
| NM_006707 | Homo sapiens butyrophilin-like 3 (BTNL3), mRNA  |
| NM_002491 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 3 (12kD, B12) (NDUFB3), mRNA  |
| NM_001386 | Homo sapiens dihydropyrimidinase-like 2 (DPYSL2), mRNA  |
| NM_000090 | Homo sapiens collagen, type III, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant) (COL3A1), mRNA                                    |
| NM_033150 | Homo sapiens collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) (COL2A1), transcript variant 2, mRNA |
| NM_001844 | Homo sapiens collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital) (COL2A1), transcript variant 1, mRNA |
| NM_025245 | Homo sapiens pre-B-cell leukemia transcription factor 4 (PBX4), mRNA  |
| NM_004342 | Homo sapiens caldesmon 1 (CALD1), transcript variant 3, mRNA  |
| NM_033157 | Homo sapiens caldesmon 1 (CALD1), transcript variant 2, mRNA  |
| NM_033140 | Homo sapiens caldesmon 1 (CALD1), transcript variant 5, mRNA  |
| NM_033139 | Homo sapiens caldesmon 1 (CALD1), transcript variant 4, mRNA  |
| NM_033138 | Homo sapiens caldesmon 1 (CALD1), transcript variant 1, mRNA  |
| NM_032635 | Homo sapiens seven transmembrane domain protein (NIFIE14), mRNA   |
| NM_030912 | Homo sapiens ring finger protein 27 (RNF27), mRNA   |
| NM_019849 | Homo sapiens solute carrier family 7, (cationic amino acid transporter, y+ system) member 10 (SLC7A10), mRNA                                    |

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| NM_017844 | Homo sapiens testis specific ankyrin-like protein 1 (LOC51281), mRNA  |
| NM_014242 | Homo sapiens zinc finger protein 237 (ZNF237), mRNA   |
| NM_001715 | Homo sapiens B lymphoid tyrosine kinase (BLK), mRNA   |
| NM_033158 | Homo sapiens hyaluronoglucosaminidase 2 (HYAL2), transcript variant 2, mRNA   |
| NM_033159 | Homo sapiens hyaluronoglucosaminidase 1 (HYAL1), transcript variant 2, mRNA   |
| NM_007312 | Homo sapiens hyaluronoglucosaminidase 1 (HYAL1), transcript variant 1, mRNA   |
| NM_006119 | Homo sapiens fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant B, mRNA                             |
| NM_033165 | Homo sapiens fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant A, mRNA                             |
| NM_033164 | Homo sapiens fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant E, mRNA                             |
| NM_033163 | Homo sapiens fibroblast growth factor 8 (androgen-induced) (FGF8), transcript variant F, mRNA                             |
| NM_002009 | Homo sapiens fibroblast growth factor 7 (keratinocyte growth factor) (FGF7), mRNA   |
| NM_021907 | Homo sapiens dystrobrevin, beta (DTNB), transcript variant 1, mRNA  |
| NM_033148 | Homo sapiens dystrobrevin, beta (DTNB), transcript variant 3, mRNA  |
| NM_033147 | Homo sapiens dystrobrevin, beta (DTNB), transcript variant 2, mRNA  |
| NM_015902 | Homo sapiens progesterone induced protein (DD5), mRNA   |
| NM_000777 | Homo sapiens cytochrome P450, subfamily IIIA (naphthalene oxidase), polypeptide 5 (CYP3A5), mRNA                          |
| NM_000764 | Homo sapiens cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 7 (CYP2A7), transcript variant 1, mRNA |
| NM_030589 | Homo sapiens cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 7 (CYP2A7), transcript variant 2, mRNA |
| NM_000762 | Homo sapiens cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 6 (CYP2A6), mRNA                       |
| NM_018957 | Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA  |
| NM_033258 | Homo sapiens G-protein gamma 8 subunit (GNG8), mRNA   |
| NM_033260 | Homo sapiens winged helix/forkhead transcription factor (HFH1), mRNA  |
| NM_018476 | Homo sapiens brain expressed, X-linked 1 (BEX1), mRNA   |
| NM_022154 | Homo sapiens up-regulated by BCG-CWS (LOC64116), mRNA   |
| NM_003773 | Homo sapiens hyaluronoglucosaminidase 2 (HYAL2), transcript variant 1, mRNA   |
| NM_032794 | Homo sapiens NG22 protein (NG22), mRNA  |
| NM_030768 | Homo sapiens integrin-linked kinase-associated serine/threonine phosphatase 2C (ILKAP), mRNA                              |
| NM_025257 | Homo sapiens NG22 protein (NG22), mRNA  |
| NM_020996 | Homo sapiens fibroblast growth factor 6 (FGF6), mRNA  |
| NM_016543 | Homo sapiens sialic acid binding Ig-like lectin 7 (SIGLEC7), mRNA   |
| NM_016134 | Homo sapiens plasma glutamate carboxypeptidase (PGCP), mRNA   |
| NM_014385 | Homo sapiens sialic acid binding Ig-like lectin 7 (SIGLEC7), mRNA   |
| NM_013287 | Homo sapiens phosphoprotein enriched in astrocytes 15 (PEA15), mRNA   |
| NM_006102 | Homo sapiens plasma glutamate carboxypeptidase (PGCP), mRNA   |
| NM_004112 | Homo sapiens fibroblast growth factor 11 (FGF11), mRNA  |
| NM_004465 | Homo sapiens fibroblast growth factor 10 (FGF10), mRNA  |
| NM_003811 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 9 (TNFSF9), mRNA  |

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| NM_003063 | Homo sapiens sarcolipin (SLN), mRNA   |
| NM_003768 | Homo sapiens phosphoprotein enriched in astrocytes 15 (PEA15), mRNA   |
| NM_002010 | Homo sapiens fibroblast growth factor 9 (glia-activating factor) (FGF9), mRNA   |
| NM_033215 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 3F (PPP1R3F), mRNA                                     |
| NM_032741 | Homo sapiens 1-acylglycerol-3-phosphate O-acyltransferase 1 (lysophosphatidic acid acyltransferase, alpha) (AGPAT1), mRNA |
| NM_022152 | Homo sapiens PP1201 protein (PP1201), mRNA  |
| NM_033225 | Homo sapiens CUB and Sushi multiple domains 1 (CSMD1), mRNA   |
| NM_014505 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 4 (KCNMB4), mRNA             |
| NM_032559 | Homo sapiens kinesin protein (LOC84643), mRNA   |
| NM_015394 | Homo sapiens zinc finger protein 10 (KOX 1) (ZNF10), mRNA   |
| NM_003388 | Homo sapiens cytoplasmic linker 2 (CYLN2), transcript variant 1, mRNA   |
| NM_032736 | Homo sapiens torsin family 1, member B (torsin B) (TOR1B), mRNA   |
| NM_032689 | Homo sapiens hypothetical protein MGC13071 (MGC13071), mRNA   |
| NM_032227 | Homo sapiens hypothetical protein FLJ22679 (FLJ22679), mRNA   |
| NM_014506 | Homo sapiens torsin family 1, member B (torsin B) (TOR1B), mRNA   |
| NM_030900 | Homo sapiens cell cycle progression 2 protein (CPR2), mRNA  |
| NM_030758 | Homo sapiens oxysterol binding protein 2 (OSBP2), mRNA  |
| NM_017698 | Homo sapiens hypothetical protein FLJ22679 (FLJ22679), mRNA   |
| NM_018225 | Homo sapiens homolog of C. elegans smu-1 (SMU-1), mRNA  |
| NM_016285 | Homo sapiens Kruppel-like factor 12 (KLF12), mRNA   |
| NM_007249 | Homo sapiens Kruppel-like factor 12 (KLF12), mRNA   |
| NM_006464 | Homo sapiens trans-golgi network protein 2 (TGOLN2), mRNA   |
| NM_006411 | Homo sapiens 1-acylglycerol-3-phosphate O-acyltransferase 1 (lysophosphatidic acid acyltransferase, alpha) (AGPAT1), mRNA |
| NM_004749 | Homo sapiens cell cycle progression 2 protein (CPR2), mRNA  |
| NM_000285 | Homo sapiens peptidase D (PEPD), mRNA   |
| NM_001467 | Homo sapiens glucose-6-phosphatase, transport (glucose-6-phosphate) protein 1 (G6PT1), mRNA                               |
| NM_033198 | Homo sapiens phosphatidylinositol glycan, class S (PIGS), mRNA  |
| NM_002920 | Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4), mRNA                                     |
| NM_018944 | Homo sapiens chromosome 21 open reading frame 45 (C21orf45), mRNA   |
| NM_033214 | Homo sapiens glycerol kinase pseudogene 2 (GKP2), mRNA  |
| NM_033089 | Homo sapiens hypothetical protein FLJ22115 (FLJ22115), mRNA   |
| NM_016015 | Homo sapiens leucine carboxyl methyltransferase (LCMT), mRNA  |
| NM_033209 | Homo sapiens Thy-1 co-transcribed (LOC94105), mRNA  |
| NM_033093 | Homo sapiens tripartite motif-containing 5 (TRIM5), transcript variant delta, mRNA  |
| NM_033092 | Homo sapiens tripartite motif-containing 5 (TRIM5), transcript variant gamma, mRNA  |
| NM_033091 | Homo sapiens tripartite motif-containing 4 (TRIM4), transcript variant beta, mRNA   |
| NM_033017 | Homo sapiens tripartite motif-containing 4 (TRIM4), transcript variant alpha, mRNA  |
| NM_033034 | Homo sapiens tripartite motif-containing 5 (TRIM5), transcript variant alpha, mRNA  |
| NM_015318 | Homo sapiens Rho-specific guanine nucleotide exchange factor p114 (P114-RHO-GEF), mRNA                                    |
| NM_007204 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 20, 103kD   |

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|           | (DDX20), mRNA   |
| NM_032864 | Homo sapiens hypothetical protein FLJ14936 (FLJ14936), mRNA   |
| NM_032639 | Homo sapiens phosphoinositol 4-phosphate adaptor protein-2 (FAPP2), mRNA  |
| NM_032583 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 11 (ABCC11), mRNA                                      |
| NM_032284 | Homo sapiens hypothetical protein FLJ14936 (FLJ14936), mRNA   |
| NM_032182 | Homo sapiens hypothetical protein FLJ13614 (FLJ13614), mRNA   |
| NM_021727 | Homo sapiens fatty acid desaturase 3 (FADS3), mRNA  |
| NM_022726 | Homo sapiens elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 4 (ELOVL4), mRNA                |
| NM_015162 | Homo sapiens lipidosin (BG1), mRNA  |
| NM_021176 | Homo sapiens islet-specific glucose-6-phosphatase catalytic subunit-related protein (IGRP), mRNA                          |
| NM_019094 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 4 (NUDT4), mRNA                                    |
| NM_019091 | Homo sapiens pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 3 (PLEKHA3), mRNA |
| NM_018293 | Homo sapiens hypothetical protein FLJ10997 (FLJ10997), mRNA   |
| NM_015994 | Homo sapiens ATPase, H <sup>+</sup> transporting lysosomal (vacuolar proton pump), member M (ATP6M), mRNA                 |
| NM_015952 | Homo sapiens PTD013 protein (PTD013), mRNA  |
| NM_015899 | Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA  |
| NM_016309 | Homo sapiens leucine carboxyl methyltransferase (LCMT), mRNA  |
| NM_013345 | Homo sapiens G protein-coupled receptor (G2A), mRNA   |
| NM_012228 | Homo sapiens pilin-like transcription factor (PILB), mRNA   |
| NM_006886 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, epsilon subunit (ATP5E), mRNA           |
| NM_002200 | Homo sapiens interferon regulatory factor 5 (IRF5), transcript variant 1, mRNA  |
| NM_032643 | Homo sapiens interferon regulatory factor 5 (IRF5), transcript variant 2, mRNA  |
| NM_004464 | Homo sapiens fibroblast growth factor 5 (FGF5), transcript variant 1, mRNA  |
| NM_033143 | Homo sapiens fibroblast growth factor 5 (FGF5), transcript variant 2, mRNA  |
| NM_020638 | Homo sapiens fibroblast growth factor 23 (FGF23), mRNA  |
| NM_000800 | Homo sapiens fibroblast growth factor 1 (acidic) (FGF1), transcript variant 1, mRNA                                       |
| NM_033137 | Homo sapiens fibroblast growth factor 1 (acidic) (FGF1), transcript variant 3, mRNA                                       |
| NM_032102 | Homo sapiens Splicing factor, arginine/serine-rich, 46kD (SRP46), mRNA  |
| NM_033136 | Homo sapiens fibroblast growth factor 1 (acidic) (FGF1), transcript variant 2, mRNA                                       |
| NM_002952 | Homo sapiens ribosomal protein S2 (RPS2), mRNA  |
| NM_033130 | Homo sapiens sialic acid binding Ig-like lectin 10 (SIGLEC10), mRNA   |
| NM_020665 | Homo sapiens kidney-specific membrane protein (NX-17), mRNA   |
| NM_033180 | Homo sapiens olfactory receptor, family 51, subfamily B, member 2 (OR51B2), mRNA  |
| NM_033179 | Homo sapiens olfactory receptor, family 51, subfamily B, member 4 (OR51B4), mRNA  |
| NM_033178 | Homo sapiens double homeobox, 4 (DUX4), mRNA  |
| NM_033049 | Homo sapiens mucin 13, epithelial transmembrane (MUC13), mRNA   |
| NM_021619 | Homo sapiens PR domain containing 12 (PRDM12), mRNA   |
| NM_020382 | Homo sapiens PR/SET domain containing protein 07 (SET07), mRNA  |
| NM_007365 | Homo sapiens peptidyl arginine deiminase, type II (PDI2), mRNA  |
| NM_015894 | Homo sapiens stathmin-like 3 (STMN3), mRNA  |

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| NM_032491 | Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4), mRNA                                    |
| NM_024551 | Homo sapiens hypothetical protein FLJ21432 (FLJ21432), mRNA  |
| NM_021830 | Homo sapiens chromosome 10 open reading frame 2 (C10orf2), mRNA  |
| NM_017972 | Homo sapiens hypothetical protein FLJ20689 (FLJ20689), mRNA  |
| NM_020398 | Homo sapiens serine protease inhibitor-like, with Kunitz and WAP domains 1 (eppin) (SPINLW1), mRNA                       |
| NM_020637 | Homo sapiens fibroblast growth factor 22 (FGF22), mRNA   |
| NM_019113 | Homo sapiens fibroblast growth factor 21 (FGF21), mRNA   |
| NM_017926 | Homo sapiens hypothetical protein FLJ20689 (FLJ20689), mRNA  |
| NM_016444 | Homo sapiens zinc finger protein 226 (ZNF226), mRNA  |
| NM_015966 | Homo sapiens serologically defined breast cancer antigen 84 (SDBCAG84), mRNA   |
| NM_015919 | Homo sapiens zinc finger protein 226 (ZNF226), mRNA  |
| NM_015474 | Homo sapiens SAM domain and HD domain, 1 (SAMHD1), mRNA  |
| NM_007096 | Homo sapiens clathrin, light polypeptide (Lca) (CLTA), transcript variant brain-specific, mRNA                           |
| NM_002007 | Homo sapiens fibroblast growth factor 4 (heparin secretory transforming protein 1, Kaposi sarcoma oncogene) (FGF4), mRNA |
| NM_001833 | Homo sapiens clathrin, light polypeptide (Lca) (CLTA), transcript variant nonbrain, mRNA                                 |
| NM_022143 | Homo sapiens NAG14 protein (NAG14), mRNA   |
| NM_005292 | Homo sapiens G protein-coupled receptor 18 (GPR18), mRNA   |
| NM_001371 | Homo sapiens dynein, axonemal, heavy polypeptide 8 (DNAH8), mRNA   |
| NM_012276 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (without TM domain), member 4 (ILT7), mRNA              |
| NM_012092 | Homo sapiens inducible T-cell co-stimulator (ICOS), mRNA   |
| NM_032447 | Homo sapiens fibrillin3 (KIAA1776), mRNA   |
| NM_024017 | Homo sapiens homeo box B9 (HOXB9), mRNA  |
| NM_019558 | Homo sapiens homeo box D8 (HOXD8), mRNA  |
| NM_032379 | Homo sapiens synaptotagmin-like 2 (SYTL2), transcript variant b, mRNA  |
| NM_024690 | Homo sapiens mucin 16 (MUC16), mRNA  |
| NM_018558 | Homo sapiens gamma-aminobutyric acid (GABA) receptor, theta (GABRQ), mRNA  |
| NM_014452 | Homo sapiens tumor necrosis factor receptor superfamily, member 21 (TNFRSF21), mRNA                                      |
| NM_006242 | Homo sapiens protein phosphatase 1, regulatory subunit 3D (PPP1R3D), mRNA  |
| NM_006545 | Homo sapiens homologous to yeast nitrogen permease (candidate tumor suppressor) (NPR2L), mRNA                            |
| NM_005398 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 3C (PPP1R3C), mRNA                                    |
| NM_006645 | Homo sapiens serologically defined colon cancer antigen 28 (SDCCAG28), mRNA  |
| NM_032800 | Homo sapiens hypothetical protein FLJ14525 (FLJ14525), mRNA  |
| NM_004265 | Homo sapiens fatty acid desaturase 2 (FADS2), mRNA   |
| NM_013402 | Homo sapiens fatty acid desaturase 1 (FADS1), mRNA   |
| NM_031428 | Homo sapiens hypothetical protein FLJ14525 (FLJ14525), mRNA  |
| NM_025243 | Homo sapiens solute carrier family 19, member 3 (SLC19A3), mRNA  |
| NM_024411 | Homo sapiens prodynorphin (PDYN), mRNA   |
| NM_007368 | Homo sapiens RAS p21 protein activator (GTPase activating protein) 3 (Ins(1,3,4,5)P4-binding protein) (GAP1IP4BP), mRNA  |
| NM_003912 | Homo sapiens myotubularin related protein 2 (MTMR2), mRNA  |



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| NM_015984 | Homo sapiens ubiquitin C-terminal hydrolase UCH37 (UCH37), mRNA  |
| NM_016109 | Homo sapiens angiopoietin-like 4 (ANGPTL4), mRNA   |
| NM_016156 | Homo sapiens myotubularin related protein 2 (MTMR2), mRNA  |
| NM_006667 | Homo sapiens progesterone receptor membrane component 1 (PGRMC1), mRNA   |
| NM_006312 | Homo sapiens nuclear receptor co-repressor 2 (NCOR2), mRNA   |
| NM_006320 | Homo sapiens progesterone receptor membrane component 2 (PGRMC2), mRNA   |
| NM_000441 | Homo sapiens solute carrier family 26, member 4 (SLC26A4), mRNA  |
| NM_032995 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 4 (ARHGEF4), transcript variant 2, mRNA  |
| NM_015320 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 4 (ARHGEF4), transcript variant 1, mRNA  |
| NM_014448 | Homo sapiens Rho guanine exchange factor (GEF) 16 (ARHGEF16), mRNA   |
| NM_005435 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 5 (ARHGEF5), mRNA  |
| NM_004723 | Homo sapiens rho/rac guanine nucleotide exchange factor (GEF) 2 (ARHGEF2), mRNA  |
| NM_004706 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 1 (ARHGEF1), mRNA  |
| NM_001031 | Homo sapiens ribosomal protein S28 (RPS28), mRNA   |
| NM_001030 | Homo sapiens ribosomal protein S27 (metallopanstimulin 1) (RPS27), mRNA  |
| NM_001029 | Homo sapiens ribosomal protein S26 (RPS26), mRNA   |
| NM_002913 | Homo sapiens replication factor C (activator 1) 1 (145kD) (RFC1), mRNA   |
| NM_005685 | Homo sapiens GTF2I repeat domain-containing 1 (GTF2IRD1), transcript variant 2, mRNA   |
| NM_005117 | Homo sapiens fibroblast growth factor 19 (FGF19), mRNA   |
| NM_001363 | Homo sapiens dyskeratosis congenita 1, dyskerin (DKC1), mRNA   |
| NM_005765 | Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) membrane sector associated protein M8-9 (APT6M8-9), mRNA                                    |
| NM_001848 | Homo sapiens collagen, type VI, alpha 1 (COL6A1), mRNA   |
| NM_004932 | Homo sapiens cadherin 6, type 2, K-cadherin (fetal kidney) (CDH6), mRNA  |
| NM_005673 | Homo sapiens solute carrier family 25 (mitochondrial carrier; Graves disease autoantigen), member 16 (SLC25A16), nuclear gene encoding mitochondrial protein, mRNA |
| NM_032943 | Homo sapiens synaptotagmin-like 2 (SYTL2), transcript variant a, mRNA  |
| NM_006932 | Homo sapiens smoothelin (SMTN), mRNA   |
| NM_000411 | Homo sapiens holocarboxylase synthetase (biotin-[propionyl-Coenzyme A-carboxylase (ATP-hydrolysing)] ligase) (HLCS), mRNA  |
| NM_030777 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 10 (SLC2A10), mRNA  |
| NM_022897 | Homo sapiens RAN binding protein 17 (RANBP17), mRNA  |
| NM_015339 | Homo sapiens activity-dependent neuroprotector (ADNP), mRNA  |
| NM_015024 | Homo sapiens RAN binding protein 16 (RANBP16), mRNA  |
| NM_022046 | Homo sapiens kallikrein 14 (KLK14), mRNA   |
| NM_020041 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA  |
| NM_019851 | Homo sapiens fibroblast growth factor 20 (FGF20), mRNA   |
| NM_019555 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 3 (ARHGEF3), mRNA  |
| NM_016277 | Homo sapiens RAB23, member RAS oncogene family (RAB23), mRNA   |
| NM_014629 | Homo sapiens Rho guanine nucleotide exchange factor (GEF) 10 (ARHGEF10), mRNA  |

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|           | mRNA  |
| NM_006989 | Homo sapiens Ca <sup>2+</sup> -promoted Ras inactivator (CAPRI), mRNA             |
| NM_006568 | Homo sapiens cell growth regulatory with ring finger domain (CGR19), mRNA         |
| NM_004841 | Homo sapiens RAS protein activator like 2 (RASAL2), mRNA                          |
| NM_004115 | Homo sapiens fibroblast growth factor 14 (FGF14), mRNA                            |
| NM_003244 | Homo sapiens TGFB-induced factor (TALE family homeobox) (TGIF), mRNA              |
| NM_007285 | Homo sapiens GABA(A) receptor-associated protein-like 2 (GABARAPL2), mRNA         |
| NM_006047 | Homo sapiens RNA binding motif protein 12 (RBM12), mRNA                           |
| NM_032588 | Homo sapiens ring finger protein 28 (RNF28), mRNA                                 |
| NM_030766 | Homo sapiens apoptosis regulator BCL-G (BCLG), mRNA                               |
| NM_022788 | Homo sapiens Purinergic receptor P2Y, G protein-coupled, 12 (P2RY12), mRNA        |
| NM_015641 | Homo sapiens testis derived transcript (3 LIM domains) (TES), mRNA                |
| NM_018144 | Homo sapiens Sec61 alpha form 2 (FLJ10578), mRNA                                  |
| NM_032015 | Homo sapiens ring finger protein 26 (RNF26), mRNA                                 |
| NM_014713 | Homo sapiens lysosomal-associated protein transmembrane 4 alpha (LAPTM4A), mRNA   |
| NM_020415 | Homo sapiens found in inflammatory zone 3 (FIZZ3), mRNA                           |
| NM_020358 | Homo sapiens ring finger protein 18 (RNF18), mRNA                                 |
| NM_005882 | Homo sapiens macrophage erythroblast attacher (MAEA), mRNA                        |
| NM_016523 | Homo sapiens killer cell lectin-like receptor subfamily F, member 1 (KLRF1), mRNA |
| NM_014141 | Homo sapiens contactin associated protein-like 2 (CNTNAP2), mRNA                  |
| NM_006862 | Homo sapiens tudor and KH domain-containing protein (TDRKH), mRNA                 |
| NM_006779 | Homo sapiens Cdc42 effector protein 2 (CEP2), mRNA                                |
| NM_006292 | Homo sapiens tumor susceptibility gene 101 (TSG101), mRNA                         |
| NM_006449 | Homo sapiens Cdc42 effector protein 3 (CEP3), mRNA                                |
| NM_002558 | Homo sapiens purinergic receptor P2X, ligand-gated ion channel, 1 (P2RX1), mRNA   |
| NM_006712 | Homo sapiens FAST kinase (FASTK), transcript variant 1, mRNA                      |
| NM_033015 | Homo sapiens FAST kinase (FASTK), transcript variant 2, mRNA                      |
| NM_025096 | Homo sapiens FAST kinase (FASTK), transcript variant 3, mRNA                      |
| NM_003852 | Homo sapiens transcriptional intermediary factor 1 (TIF1), mRNA                   |
| NM_003770 | Homo sapiens keratin, hair, acidic, 7 (KRTHA7), mRNA                              |
| NM_021013 | Homo sapiens keratin, hair, acidic, 4 (KRTHA4), mRNA                              |
| NM_004068 | Homo sapiens adaptor-related protein complex 2, mu 1 subunit (AP2M1), mRNA        |
| NM_006803 | Homo sapiens adaptor-related protein complex 3, mu 2 subunit (AP3M2), mRNA        |
| NM_005498 | Homo sapiens adaptor-related protein complex 1, mu 2 subunit (AP1M2), mRNA        |
| NM_032981 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant zeta, mRNA            |
| NM_032980 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant epsilon, mRNA         |
| NM_032979 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant gamma, mRNA           |
| NM_032978 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant beta, mRNA            |
| NM_032975 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant alpha, mRNA           |
| NM_001392 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant DTN3, mRNA            |
| NM_001391 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant DTN2, mRNA            |
| NM_001390 | Homo sapiens dystrobrevin, alpha (DTNA), transcript variant DTN1, mRNA            |
| NM_001026 | Homo sapiens ribosomal protein S24 (RPS24), transcript variant 2, mRNA            |
| NM_033022 | Homo sapiens ribosomal protein S24 (RPS24), transcript variant 1, mRNA            |

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| NM_024416 | Homo sapiens osteoglycin (osteoinductive factor, mimecan) (OGN), transcript variant 2, mRNA   |
| NM_033014 | Homo sapiens osteoglycin (osteoinductive factor, mimecan) (OGN), transcript variant 1, mRNA   |
| NM_014057 | Homo sapiens osteoglycin (osteoinductive factor, mimecan) (OGN), transcript variant 3, mRNA   |
| NM_016152 | Homo sapiens retinoic acid receptor, beta (RARβ), transcript variant 2, mRNA  |
| NM_000965 | Homo sapiens retinoic acid receptor, beta (RARβ), transcript variant 1, mRNA  |
| NM_032977 | Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10), transcript variant D, mRNA   |
| NM_032976 | Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10), transcript variant C, mRNA   |
| NM_032974 | Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10), transcript variant B, mRNA   |
| NM_001230 | Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10), transcript variant A, mRNA   |
| NM_032992 | Homo sapiens caspase 6, apoptosis-related cysteine protease (CASP6), transcript variant beta, mRNA  |
| NM_001226 | Homo sapiens caspase 6, apoptosis-related cysteine protease (CASP6), transcript variant alpha, mRNA   |
| NM_033133 | Homo sapiens 2',3'-cyclic nucleotide 3' phosphodiesterase (CNP), mRNA   |
| NM_033125 | Homo sapiens organic cation transporter OKB1 (OKB1), mRNA   |
| NM_020349 | Homo sapiens ankyrin repeat domain 2 (stretch responsive muscle) (ANKRD2), mRNA   |
| NM_000540 | Homo sapiens ryanodine receptor 1 (skeletal) (RYR1), mRNA   |
| NM_016930 | Homo sapiens syntaxin 18 (STX18), mRNA  |
| NM_014808 | Homo sapiens KIAA0793 gene product (KIAA0793), mRNA   |
| NM_005428 | Homo sapiens vav 1 oncogene (VAV1), mRNA  |
| NM_005747 | Homo sapiens elastase 3A, pancreatic (protease E) (ELA3A), mRNA   |
| NM_000922 | Homo sapiens phosphodiesterase 3B, cGMP-inhibited (PDE3B), mRNA   |
| NM_033069 | Homo sapiens ADG-90 protein (ADG-90), mRNA  |
| NM_033085 | Homo sapiens fetal and adult testis expressed transcript protein (FATE), mRNA   |
| NM_015001 | Homo sapiens SMART/HDAC1 associated repressor protein (SHARP), mRNA   |
| NM_032984 | Homo sapiens caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2), transcript variant 4, mRNA |
| NM_032983 | Homo sapiens caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2), transcript variant 3, mRNA |
| NM_032982 | Homo sapiens caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2), transcript variant 1, mRNA |
| NM_032957 | Homo sapiens tumor necrosis factor receptor superfamily, member 6b, decoy (TNFRSF6B), transcript variant 1, mRNA  |
| NM_032945 | Homo sapiens tumor necrosis factor receptor superfamily, member 6b, decoy (TNFRSF6B), transcript variant M68C, mRNA   |
| NM_001224 | Homo sapiens caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2), transcript variant 2, mRNA |
| NM_015647 | Homo sapiens tumor necrosis factor receptor superfamily, member 6b, decoy (TNFRSF6B), transcript variant 3, mRNA  |
| NM_033012 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 11  |

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|           | (TNFSF11), transcript variant 2, mRNA   |
| NM_003701 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 11 (TNFSF11), transcript variant 1, mRNA                |
| NM_005409 | Homo sapiens small inducible cytokine subfamily B (Cys-X-Cys), member 11 (SCYB11), mRNA                                 |
| NM_005035 | Homo sapiens polymerase (RNA) mitochondrial (DNA directed) (POLRMT), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_006980 | Homo sapiens transcription termination factor, mitochondrial (MTERF), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001305 | Homo sapiens claudin 4 (CLDN4), mRNA  |
| NM_032996 | Homo sapiens caspase 9, apoptosis-related cysteine protease (CASP9), transcript variant beta, mRNA                      |
| NM_001229 | Homo sapiens caspase 9, apoptosis-related cysteine protease (CASP9), transcript variant alpha, mRNA                     |
| NM_004346 | Homo sapiens caspase 3, apoptosis-related cysteine protease (CASP3), transcript variant alpha, mRNA                     |
| NM_032991 | Homo sapiens caspase 3, apoptosis-related cysteine protease (CASP3), transcript variant beta, mRNA                      |
| NM_033057 | Homo sapiens olfactory receptor, family 2, subfamily B, member 2 (OR2B2), mRNA  |
| NM_033051 | Homo sapiens thymic stromal co-transporter (TSCOT), mRNA  |
| NM_033048 | Homo sapiens CPX chromosome region, candidate 1 (CPXCR1), mRNA  |
| NM_033007 | Homo sapiens death effector filament-forming Ced-4-like apoptosis protein (DEFCAP), transcript variant E, mRNA          |
| NM_033006 | Homo sapiens death effector filament-forming Ced-4-like apoptosis protein (DEFCAP), transcript variant D, mRNA          |
| NM_033005 | Homo sapiens death effector filament-forming Ced-4-like apoptosis protein (DEFCAP), transcript variant C, mRNA          |
| NM_033004 | Homo sapiens death effector filament-forming Ced-4-like apoptosis protein (DEFCAP), transcript variant A, mRNA          |
| NM_014922 | Homo sapiens death effector filament-forming Ced-4-like apoptosis protein (DEFCAP), transcript variant B, mRNA          |
| NM_000088 | Homo sapiens collagen, type I, alpha 1 (COL1A1), mRNA   |
| NM_019105 | Homo sapiens tenascin XB (TNXB), transcript variant XB, mRNA  |
| NM_033036 | Homo sapiens beta-galactose-3-O-sulfotransferase 3 (GAL3ST2), mRNA  |
| NM_033029 | Homo sapiens leishmanolysin-like (metallopeptidase M8 family) (LMLN), mRNA  |
| NM_033028 | Homo sapiens Bardet-Biedl syndrome 4 (BBS4), mRNA   |
| NM_021807 | Homo sapiens secretory protein SEC8 (SEC8), mRNA  |
| NM_020137 | Homo sapiens GRIP-associated protein 1 (GRASP1), mRNA   |
| NM_015133 | Homo sapiens mitogen-activated protein kinase 8 interacting protein 3 (MAPK8IP3), mRNA                                  |
| NM_014006 | Homo sapiens PI-3-kinase-related kinase SMG-1 (SMG1), mRNA  |
| NM_021914 | Homo sapiens cofilin 2 (muscle) (CFL2), mRNA  |
| NM_032520 | Homo sapiens hypothetical protein CAB56184 (CAB56184), mRNA   |
| NM_032923 | Homo sapiens hypothetical protein MGC16025 (MGC16025), mRNA   |
| NM_032917 | Homo sapiens hypothetical protein MGC2848 (MGC2848), mRNA   |
| NM_032868 | Homo sapiens hypothetical protein FLJ14981 (FLJ14981), mRNA   |
| NM_032862 | Homo sapiens hypothetical protein FLJ14926 (FLJ14926), mRNA   |
| NM_032801 | Homo sapiens hypothetical protein FLJ14529 (FLJ14529), mRNA   |
| NM_032753 | Homo sapiens hypothetical protein MGC15631 (MGC15631), mRNA   |
| NM_032737 | Homo sapiens hypothetical protein MGC2721 (MGC2721), mRNA   |

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| NM_032668 | Homo sapiens hypothetical protein MGC4771 (MGC4771), mRNA  |
| NM_032503 | Homo sapiens G protein-coupled receptor slt (SLT), mRNA  |
| NM_032377 | Homo sapiens hypothetical protein MGC4549 (MGC4549), mRNA  |
| NM_032326 | Homo sapiens hypothetical protein MGC4618 (MGC4618), mRNA  |
| NM_032306 | Homo sapiens hypothetical protein MGC10974 (MGC10974), mRNA  |
| NM_032281 | Homo sapiens hypothetical protein DKFZp547J036 (DKFZp547J036), mRNA  |
| NM_015650 | Homo sapiens microtubule-interacting protein that associates with TRAF3 (MIP-T3), mRNA                     |
| NM_031487 | Homo sapiens hypothetical protein MGC4604 (MGC4604), mRNA  |
| NM_031470 | Homo sapiens junctional adhesion molecule 3 (JAM3), mRNA   |
| NM_031304 | Homo sapiens hypothetical protein MGC4293 (MGC4293), mRNA  |
| NM_031213 | Homo sapiens hypothetical protein MGC:5244, (MGC:5244), mRNA   |
| NM_031208 | Homo sapiens hypothetical protein DKFZp566J2046 (DKFZp566J2046), mRNA                                      |
| NM_030924 | Homo sapiens hypothetical protein PRD-NY3 (PRD-NY3), mRNA  |
| NM_030824 | Homo sapiens hypothetical protein FLJ14356 (FLJ14356), mRNA  |
| NM_030631 | Homo sapiens solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21 (SLC25A21), mRNA |
| NM_024571 | Homo sapiens hypothetical protein FLJ22940 (FLJ22940), mRNA  |
| NM_025015 | Homo sapiens KIAA0417 gene product (KIAA0417), mRNA  |
| NM_024103 | Homo sapiens hypothetical protein MGC2615 (MGC2615), mRNA  |
| NM_030578 | Homo sapiens hypothetical protein MGC4093 (MGC4093), mRNA  |
| NM_014015 | Homo sapiens MYLE protein (MYLE), mRNA   |
| NM_025094 | Homo sapiens hypothetical protein FLJ22184 (FLJ22184), mRNA  |
| NM_025078 | Homo sapiens hypothetical protein FLJ22378 (FLJ22378), mRNA  |
| NM_025061 | Homo sapiens hypothetical protein FLJ23420 (FLJ23420), mRNA  |
| NM_024967 | Homo sapiens hypothetical protein FLJ11637 (FLJ11637), mRNA  |
| NM_024898 | Homo sapiens hypothetical protein FLJ22757 (FLJ22757), mRNA  |
| NM_024877 | Homo sapiens hypothetical protein FLJ13265 (FLJ13265), mRNA  |
| NM_024726 | Homo sapiens hypothetical protein FLJ22527 (FLJ22527), mRNA  |
| NM_024719 | Homo sapiens hypothetical protein FLJ22474 (FLJ22474), mRNA  |
| NM_024600 | Homo sapiens hypothetical protein FLJ20898 (FLJ20898), mRNA  |
| NM_024508 | Homo sapiens hypothetical protein MGC10796 (MGC10796), mRNA  |
| NM_024341 | Homo sapiens hypothetical protein MGC4054 (MGC4054), mRNA  |
| NM_024064 | Homo sapiens hypothetical protein MGC5363 (MGC5363), mRNA  |
| NM_024029 | Homo sapiens hypothetical protein MGC3262 (MGC3262), mRNA  |
| NM_023078 | Homo sapiens hypothetical protein FLJ13852 (FLJ13852), mRNA  |
| NM_023076 | Homo sapiens hypothetical protein FLJ23360 (FLJ23360), mRNA  |
| NM_022842 | Homo sapiens hypothetical protein FLJ22969 (FLJ22969), mRNA  |
| NM_022737 | Homo sapiens hypothetical protein FLJ13055 (FLJ13055), mRNA  |
| NM_022459 | Homo sapiens hypothetical protein FLJ13046 similar to exportin 4; KIAA1721 pr (FLJ13046), mRNA             |
| NM_022437 | Homo sapiens ATP-binding cassette, sub-family G (WHITE), member 8 (sterolin 2) (ABCG8), mRNA               |
| NM_022135 | Homo sapiens popeye protein 2 (POP2), mRNA   |
| NM_022066 | Homo sapiens likely ortholog of mouse ubiquitin-conjugating enzyme E2-230K (E2-230K), mRNA                 |
| NM_015480 | Homo sapiens nectin 3 (DKFZp566B0846), mRNA  |
| NM_004240 | Homo sapiens thyroid hormone receptor interactor 10 (TRIP10), mRNA   |
| NM_003589 | Homo sapiens cullin 4A (CUL4A), mRNA   |
| NM_021731 | Homo sapiens hypothetical protein PP3501 (PP3501), mRNA  |
| NM_020129 | Homo sapiens placental protein 13-like protein (LOC56891), mRNA  |
| NM_020196 | Homo sapiens HCNP protein; XPA-binding protein 2 (HCNP), mRNA  |

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| NM_020224 | Homo sapiens hypothetical protein DKFZp547O146 (DKFZp547O146), mRNA  |
| NM_019064 | Homo sapiens hypothetical protein (FLJ10832), mRNA   |
| NM_019012 | Homo sapiens phosphoinositol 3-phosphate-binding protein-2 (PEPP2), mRNA   |
| NM_018635 | Homo sapiens hypothetical protein PRO2900 (PRO2900), mRNA  |
| NM_018687 | Homo sapiens hepatocellular carcinoma-associated gene TD26 (LOC55908), mRNA  |
| NM_018441 | Homo sapiens peroxisomal trans 2-enoyl CoA reductase; putative short chain alcohol dehydrogenase (HSA250303), mRNA |
| NM_018645 | Homo sapiens hypothetical protein HES6 (HES6), mRNA  |
| NM_017967 | Homo sapiens hypothetical protein FLJ20850 (FLJ20850), mRNA  |
| NM_017914 | Homo sapiens hypothetical protein FLJ20640 (FLJ20640), mRNA  |
| NM_017905 | Homo sapiens hypothetical protein FLJ20623 (FLJ20623), mRNA  |
| NM_017722 | Homo sapiens hypothetical protein FLJ20244 (FLJ20244), mRNA  |
| NM_017668 | Homo sapiens LIS1-interacting protein NUDE1, rat homolog (NUDE1), mRNA   |
| NM_017616 | Homo sapiens hypothetical protein FLJ20004 (FLJ20004), mRNA  |
| NM_018185 | Homo sapiens hypothetical protein FLJ10704 (FLJ10704), mRNA  |
| NM_018074 | Homo sapiens hypothetical protein FLJ10374 (FLJ10374), mRNA  |
| NM_018057 | Homo sapiens homolog of rat orphan transporter v7-3 (NTT73), mRNA  |
| NM_018049 | Homo sapiens hypothetical protein FLJ10297 (FLJ10297), mRNA  |
| NM_018028 | Homo sapiens hypothetical protein FLJ10211 (FLJ10211), mRNA  |
| NM_018000 | Homo sapiens hypothetical protein FLJ10116 (FLJ10116), mRNA  |
| NM_016510 | Homo sapiens putative selenocysteine lyase (SCLY), mRNA  |
| NM_016434 | Homo sapiens tumor necrosis factor receptor superfamily, member 6b, decoy (TNFRSF6B), transcript variant 2, mRNA   |
| NM_016289 | Homo sapiens MO25 protein (LOC51719), mRNA   |
| NM_016264 | Homo sapiens GIOT-2 for gonadotropin inducible transcription repressor-2 (GIOT-2), mRNA                            |
| NM_016149 | Homo sapiens protein inhibitor of activated STAT protein PIASy (PIASy), mRNA                                       |
| NM_015897 | Homo sapiens protein inhibitor of activated STAT protein PIASy (PIASy), mRNA                                       |
| NM_016581 | Homo sapiens ECSIT (LOC51295), mRNA  |
| NM_016479 | Homo sapiens hypothetical protein (LOC51246), mRNA   |
| NM_016474 | Homo sapiens hypothetical protein (LOC51244), mRNA   |
| NM_016094 | Homo sapiens HSPC042 protein (LOC51122), mRNA  |
| NM_015942 | Homo sapiens CGI-12 protein (LOC51001), mRNA   |
| NM_016475 | Homo sapiens hypothetical protein (HSPC213), mRNA  |
| NM_016457 | Homo sapiens protein kinase D2 (PKD2), mRNA  |
| NM_016111 | Homo sapiens KIAA0683 gene product (KIAA0683), mRNA  |
| NM_014049 | Homo sapiens NPD002 protein (NPD002), mRNA   |
| NM_014963 | Homo sapiens KIAA0963 protein (KIAA0963), mRNA   |
| NM_015571 | Homo sapiens SUMO-1-specific protease (SUSP1), mRNA  |
| NM_014789 | Homo sapiens KIAA0628 gene product (KIAA0628), mRNA  |
| NM_014714 | Homo sapiens KIAA0590 gene product (KIAA0590), mRNA  |
| NM_014758 | Homo sapiens KIAA0254 gene product (KIAA0254), mRNA  |
| NM_014065 | Homo sapiens HT001 protein (HT001), mRNA   |
| NM_014170 | Homo sapiens HSPC135 protein (HSPC135), mRNA   |
| NM_015462 | Homo sapiens DKFZP586L0724 protein (DKFZP586L0724), mRNA   |
| NM_015642 | Homo sapiens zinc finger protein 288 (ZNF288), mRNA  |
| NM_015493 | Homo sapiens DKFZP434N161 protein (DKFZP434N161), mRNA   |
| NM_014446 | Homo sapiens muscle-specific beta 1 integrin binding protein (MIBP), mRNA  |
| NM_013314 | Homo sapiens B-cell linker (BLNK), mRNA  |

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| NM_007086 | Homo sapiens AND-1 protein (AND-1), mRNA  |
| NM_006701 | Homo sapiens similar to S. pombe dim1+ (DIM1), mRNA   |
| NM_006300 | Homo sapiens zinc finger protein 230 (ZNF230), mRNA   |
| NM_006477 | Homo sapiens RAS-related on chromosome 22 (RRP22), mRNA   |
| NM_006087 | Homo sapiens tubulin, beta, 5 (TUBB5), mRNA   |
| NM_006056 | Homo sapiens G protein-coupled receptor 66 (GPR66), mRNA  |
| NM_005815 | Homo sapiens Kruppel-type zinc finger (C2H2) (ZK1), mRNA  |
| NM_005817 | Homo sapiens cargo selection protein (mannose 6 phosphate receptor binding protein) (TIP47), mRNA   |
| NM_005801 | Homo sapiens putative translation initiation factor (SUI1), mRNA  |
| NM_005837 | Homo sapiens POP7 (processing of precursor, S. cerevisiae) homolog (RPP20), mRNA  |
| NM_005776 | Homo sapiens cornichon-like (CNIL), mRNA  |
| NM_004970 | Homo sapiens insulin-like growth factor binding protein, acid labile subunit (IGFALS), mRNA   |
| NM_004945 | Homo sapiens dynamin 2 (DNM2), mRNA   |
| NM_004283 | Homo sapiens RAB3D, member RAS oncogene family (RAB3D), mRNA  |
| NM_004548 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10 (22kD, PDSW) (NDUFB10), mRNA   |
| NM_004124 | Homo sapiens glia maturation factor, beta (GMFB), mRNA  |
| NM_004877 | Homo sapiens glia maturation factor, gamma (GMFG), mRNA   |
| NM_004907 | Homo sapiens immediate early protein (ETR101), mRNA   |
| NM_004044 | Homo sapiens 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase (ATIC), mRNA  |
| NM_004315 | Homo sapiens N-acylsphingosine amidohydrolase (acid ceramidase) (ASAH), mRNA  |
| NM_004846 | Homo sapiens eukaryotic translation initiation factor 4E-like 3 (EIF4EL3), mRNA   |
| NM_003765 | Homo sapiens syntaxin 10 (STX10), mRNA  |
| NM_003110 | Homo sapiens Sp2 transcription factor (SP2), mRNA   |
| NM_003113 | Homo sapiens nuclear antigen Sp100 (SP100), mRNA  |
| NM_000543 | Homo sapiens sphingomyelin phosphodiesterase 1, acid lysosomal (acid sphingomyelinase) (SMPD1), mRNA  |
| NM_003072 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 (SMARCA4), mRNA  |
| NM_002807 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 1 (PSMD1), mRNA   |
| NM_002704 | Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP), mRNA |
| NM_000089 | Homo sapiens collagen, type I, alpha 2 (COL1A2), mRNA   |
| NM_001687 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, delta subunit (ATP5D), mRNA   |
| NM_020168 | Homo sapiens p21(CDKN1A)-activated kinase 6 (PAK6), mRNA  |
| NM_032657 | Homo sapiens hypothetical protein MGC10442 (MGC10442), mRNA   |
| NM_032571 | Homo sapiens EGF-like module-containing mucin-like receptor EMR3 (EMR3), mRNA   |
| NM_032413 | Homo sapiens normal mucosa of esophagus specific 1 (NMES1), mRNA  |
| NM_015093 | Homo sapiens TAK1-binding protein 2 (TAB2), mRNA  |
| NM_031947 | Homo sapiens ornithine transporter 2 (ORNT2), mRNA  |
| NM_005563 | Homo sapiens stathmin 1/oncoprotein 18 (STMN1), mRNA  |
| NM_024662 | Homo sapiens hypothetical protein FLJ10774 (FLJ10774), mRNA   |

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| NM_024637 | Homo sapiens beta-galactose-3-O-sulfotransferase, 4 (GAL3ST-4), mRNA  |
| NM_024617 | Homo sapiens hypothetical protein FLJ13409 (FLJ13409), mRNA   |
| NM_020796 | Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (SEMA6A), mRNA   |
| NM_013283 | Homo sapiens methionine adenosyltransferase II, beta (MAT2B), mRNA  |
| NM_012231 | Homo sapiens PR domain containing 2, with ZNF domain (PRDM2), mRNA  |
| NM_020428 | Homo sapiens CTL2 gene (CTL2), mRNA   |
| NM_015866 | Homo sapiens PR domain containing 2, with ZNF domain (PRDM2), mRNA  |
| NM_014771 | Homo sapiens 95 kDa retinoblastoma protein binding protein; KIAA0661 gene pro (KIAA0661), mRNA                |
| NM_014454 | Homo sapiens p53 regulated PA26 nuclear protein (PA26), mRNA  |
| NM_013447 | Homo sapiens egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2), mRNA            |
| NM_006499 | Homo sapiens lectin, galactoside-binding, soluble, 8 (galectin 8) (LGALS8), mRNA                              |
| NM_006031 | Homo sapiens pericentrin 2 (kendrin) (PCNT2), mRNA  |
| NM_022040 | Homo sapiens Williams-Beuren syndrome chromosome region 5 (WBSCR5), transcript variant 1, mRNA                |
| NM_032464 | Homo sapiens Williams-Beuren syndrome chromosome region 5 (WBSCR5), transcript variant 4, mRNA                |
| NM_032463 | Homo sapiens Williams-Beuren syndrome chromosome region 5 (WBSCR5), transcript variant 2, mRNA                |
| NM_014146 | Homo sapiens Williams-Beuren syndrome chromosome region 5 (WBSCR5), transcript variant 3, mRNA                |
| NM_031992 | Homo sapiens Williams-Beuren syndrome chromosome region 1 (WBSCR1), transcript variant 2, mRNA                |
| NM_006234 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide J (13.3kD) (POLR2J), transcript variant a, mRNA   |
| NM_032959 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide J (13.3kD) (POLR2J), transcript variant b, mRNA   |
| NM_032958 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide J (13.3kD) (POLR2J), transcript variant c, mRNA   |
| NM_002694 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide C (33kD) (POLR2C), transcript variant alpha, mRNA |
| NM_032940 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide C (33kD) (POLR2C), transcript variant gamma, mRNA |
| NM_033011 | Homo sapiens plasminogen activator, tissue (PLAT), transcript variant 3, mRNA                                 |
| NM_000931 | Homo sapiens plasminogen activator, tissue (PLAT), transcript variant 2, mRNA                                 |
| NM_000930 | Homo sapiens plasminogen activator, tissue (PLAT), transcript variant 1, mRNA                                 |
| NM_033013 | Homo sapiens nuclear receptor subfamily 1, group I, member 2 (NR1I2), transcript variant 3, mRNA              |
| NM_003889 | Homo sapiens nuclear receptor subfamily 1, group I, member 2 (NR1I2), transcript variant 1, mRNA              |
| NM_022002 | Homo sapiens nuclear receptor subfamily 1, group I, member 2 (NR1I2), transcript variant 2, mRNA              |
| NM_022170 | Homo sapiens Williams-Beuren syndrome chromosome region 1 (WBSCR1), transcript variant 1, mRNA                |
| NM_032408 | Homo sapiens bromodomain adjacent to zinc finger domain, 1B (BAZ1B), transcript variant 2, mRNA               |
| NM_023005 | Homo sapiens bromodomain adjacent to zinc finger domain, 1B (BAZ1B), transcript variant 1, mRNA               |
| NM_001024 | Homo sapiens ribosomal protein S21 (RPS21), mRNA  |



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| NM_012138 | Homo sapiens apoptosis antagonizing transcription factor (DED), mRNA   |
| NM_016343 | Homo sapiens centromere protein F (350/400kD, mitotin) (CENPF), mRNA   |
| NM_032988 | Homo sapiens transducin (beta)-like 2 (TBL2), transcript variant 2, mRNA   |
| NM_032052 | Homo sapiens zinc finger protein 278 (ZNF278), transcript variant 3, mRNA  |
| NM_032051 | Homo sapiens zinc finger protein 278 (ZNF278), transcript variant 4, mRNA  |
| NM_032050 | Homo sapiens zinc finger protein 278 (ZNF278), transcript variant 2, mRNA  |
| NM_014323 | Homo sapiens zinc finger protein 278 (ZNF278), transcript variant 1, mRNA  |
| NM_033003 | Homo sapiens general transcription factor II, i (GTF2I), transcript variant 5, mRNA  |
| NM_001518 | Homo sapiens general transcription factor II, i (GTF2I), transcript variant 4, mRNA  |
| NM_033001 | Homo sapiens general transcription factor II, i (GTF2I), transcript variant 3, mRNA  |
| NM_033000 | Homo sapiens general transcription factor II, i (GTF2I), transcript variant 2, mRNA  |
| NM_032999 | Homo sapiens general transcription factor II, i (GTF2I), transcript variant 1, mRNA  |
| NM_002904 | Homo sapiens RD RNA-binding protein (RDBP), mRNA   |
| NM_002755 | Homo sapiens mitogen-activated protein kinase kinase 1 (MAP2K1), mRNA  |
| NM_012453 | Homo sapiens transducin (beta)-like 2 (TBL2), transcript variant 1, mRNA   |
| NM_006347 | Homo sapiens peptidyl prolyl isomerase H (cyclophilin H) (PPIH), mRNA  |
| NM_001631 | Homo sapiens alkaline phosphatase, intestinal (ALPI), mRNA   |
| NM_021151 | Homo sapiens carnitine O-octanoyltransferase (CROT), mRNA  |
| NM_005090 | Homo sapiens phospholipase A2, group IVB (cytosolic) (PLA2G4B), mRNA   |
| NM_000124 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 6 (ERCC6), mRNA                     |
| NM_020157 | Homo sapiens otoraplin (OTOR), mRNA  |
| NM_018313 | Homo sapiens polybromo 1 (PB1), mRNA   |
| NM_018165 | Homo sapiens polybromo 1 (PB1), mRNA   |
| NM_016503 | Homo sapiens mitochondrial ribosomal protein L30 (MRPL30), mRNA  |
| NM_012139 | Homo sapiens deafness locus associated putative guanine nucleotide exchange f (DELGEF), mRNA   |
| NM_007061 | Homo sapiens serum constituent protein (MSE55), mRNA   |
| NM_005379 | Homo sapiens myosin IA (MYO1A), mRNA   |
| NM_000500 | Homo sapiens cytochrome P450, subfamily XXIA (steroid 21-hydroxylase, congenital adrenal hyperplasia), polypeptide 2 (CYP21A2), mRNA |
| NM_000063 | Homo sapiens complement component 2 (C2), mRNA   |
| NM_014078 | Homo sapiens mitochondrial ribosomal protein L13 (MRPL13), mRNA  |
| NM_021134 | Homo sapiens mitochondrial ribosomal protein L23 (MRPL23), mRNA  |
| NM_020249 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 9 (ADAMTS9), mRNA             |
| NM_018094 | Homo sapiens G1 to S phase transition 2 (GSPT2), mRNA  |
| NM_014180 | Homo sapiens mitochondrial ribosomal protein L22 (MRPL22), mRNA  |
| NM_014175 | Homo sapiens mitochondrial ribosomal protein L15 (MRPL15), mRNA  |
| NM_015385 | Homo sapiens SH3-domain protein 5 (ponsin) (SH3D5), mRNA   |
| NM_006434 | Homo sapiens SH3-domain protein 5 (ponsin) (SH3D5), mRNA   |
| NM_000135 | Homo sapiens Fanconi anemia, complementation group A (FANCA), mRNA   |
| NM_005656 | Homo sapiens transmembrane protease, serine 2 (TMPRSS2), mRNA  |
| NM_021974 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA   |
| NM_004167 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15), transcript variant 2, mRNA                          |

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| NM_032965 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15), transcript variant 3, mRNA |
| NM_032964 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15), transcript variant 1, mRNA |
| NM_032454 | Homo sapiens serine/threonine kinase 19 (STK19), transcript variant 2, mRNA                                 |
| NM_007057 | Homo sapiens ZW10 interactor (ZWINT), transcript variant 1, mRNA  |
| NM_032997 | Homo sapiens ZW10 interactor (ZWINT), transcript variant 2, mRNA  |
| NM_003262 | Homo sapiens translocation protein 1 (TLOC1), mRNA  |
| NM_032470 | Homo sapiens tenascin XB (TNXB), transcript variant XB-S, mRNA  |
| NM_004166 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14), transcript variant 1, mRNA |
| NM_032963 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14), transcript variant 3, mRNA |
| NM_032962 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14), transcript variant 2, mRNA |
| NM_021219 | Homo sapiens junctional adhesion molecule 2 (JAM2), mRNA  |
| NM_014456 | Homo sapiens programmed cell death 4 (neoplastic transformation inhibitor) (PDCD4), mRNA                    |
| NM_004197 | Homo sapiens serine/threonine kinase 19 (STK19), transcript variant 1, mRNA                                 |
| NM_007214 | Homo sapiens SEC63, endoplasmic reticulum translocon component (S. cerevisiae (SEC63L), mRNA                |
| NM_006808 | Homo sapiens protein translocation complex beta (SEC61B), mRNA  |
| NM_001028 | Homo sapiens ribosomal protein S25 (RPS25), mRNA  |
| NM_001022 | Homo sapiens ribosomal protein S19 (RPS19), mRNA  |
| NM_001021 | Homo sapiens ribosomal protein S17 (RPS17), mRNA  |
| NM_001020 | Homo sapiens ribosomal protein S16 (RPS16), mRNA  |
| NM_001018 | Homo sapiens ribosomal protein S15 (RPS15), mRNA  |
| NM_001017 | Homo sapiens ribosomal protein S13 (RPS13), mRNA  |
| NM_012423 | Homo sapiens ribosomal protein L13a (RPL13A), mRNA  |
| NM_002907 | Homo sapiens RecQ protein-like (DNA helicase Q1-like) (RECQL), transcript variant 1, mRNA                   |
| NM_032941 | Homo sapiens RecQ protein-like (DNA helicase Q1-like) (RECQL), transcript variant 2, mRNA                   |
| NM_021128 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide L (7.6kD) (POLR2L), mRNA                        |
| NM_006233 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide I (14.5kD) (POLR2I), mRNA                       |
| NM_006232 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide H (POLR2H), mRNA                                |
| NM_002695 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E), mRNA                         |
| NM_004805 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide D (POLR2D), mRNA                                |
| NM_000937 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A), mRNA                        |
| NM_001987 | Homo sapiens ets variant gene 6 (TEL oncogene) (ETV6), mRNA   |
| NM_032973 | Homo sapiens protocadherin 22 (PCDH22), transcript variant c, mRNA  |
| NM_032972 | Homo sapiens protocadherin 22 (PCDH22), transcript variant b, mRNA  |
| NM_032971 | Homo sapiens protocadherin 22 (PCDH22), transcript variant a, mRNA  |
| NM_020403 | Homo sapiens protocadherin 9 (PCDH9), mRNA  |
| NM_022843 | Homo sapiens protocadherin 20 (PCDH20), mRNA  |
| NM_032949 | Homo sapiens protocadherin 8 (PCDH8), transcript variant 2, mRNA  |

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| NM_032457 | Homo sapiens BH-protocadherin (brain-heart) (PCDH7), transcript variant c, mRNA  |
| NM_032456 | Homo sapiens BH-protocadherin (brain-heart) (PCDH7), transcript variant b, mRNA  |
| NM_002589 | Homo sapiens BH-protocadherin (brain-heart) (PCDH7), transcript variant a, mRNA  |
| NM_016580 | Homo sapiens protocadherin 12 (PCDH12), mRNA   |
| NM_032420 | Homo sapiens protocadherin 1 (cadherin-like 1) (PCDH1), transcript variant 2, mRNA                                     |
| NM_032969 | Homo sapiens protocadherin 11 (PCDH11), transcript variant d, mRNA   |
| NM_032968 | Homo sapiens protocadherin 11 (PCDH11), transcript variant c, mRNA   |
| NM_032967 | Homo sapiens protocadherin 11 (PCDH11), transcript variant b, mRNA   |
| NM_032950 | Homo sapiens matrix metalloproteinase 28 (MMP28), transcript variant 2, mRNA   |
| NM_024302 | Homo sapiens matrix metalloproteinase 28 (MMP28), transcript variant 1, mRNA   |
| NM_006575 | Homo sapiens mitogen-activated protein kinase kinase kinase kinase 5 (MAP4K5), mRNA                                    |
| NM_004635 | Homo sapiens mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3), mRNA                              |
| NM_002587 | Homo sapiens protocadherin 1 (cadherin-like 1) (PCDH1), transcript variant 1, mRNA                                     |
| NM_004759 | Homo sapiens mitogen-activated protein kinase-activated protein kinase 2 (MAPKAPK2), transcript variant 1, mRNA        |
| NM_032960 | Homo sapiens mitogen-activated protein kinase-activated protein kinase 2 (MAPKAPK2), transcript variant 2, mRNA        |
| NM_032515 | Homo sapiens Bcl-2-related ovarian killer protein-like (BOKL), mRNA  |
| NM_015166 | Homo sapiens KIAA0027 protein (MLC1), mRNA   |
| NM_001795 | Homo sapiens cadherin 5, type 2, VE-cadherin (vascular epithelium) (CDH5), mRNA  |
| NM_001794 | Homo sapiens cadherin 4, type 1, R-cadherin (retinal) (CDH4), mRNA   |
| NM_001793 | Homo sapiens cadherin 3, type 1, P-cadherin (placental) (CDH3), mRNA   |
| NM_001792 | Homo sapiens cadherin 2, type 1, N-cadherin (neuronal) (CDH2), mRNA  |
| NM_004360 | Homo sapiens cadherin 1, type 1, E-cadherin (epithelial) (CDH1), mRNA  |
| NM_006137 | Homo sapiens CD7 antigen (p41) (CD7), mRNA   |
| NM_005864 | Homo sapiens signal transduction protein (SH3 containing) (EFS2), transcript variant 1, mRNA                           |
| NM_032459 | Homo sapiens signal transduction protein (SH3 containing) (EFS2), transcript variant 2, mRNA                           |
| NM_032107 | Homo sapiens lethal (3) malignant brain tumor l(3)mbt protein (Drosophila) ho (H-L(3)MBT), transcript variant II, mRNA |
| NM_015478 | Homo sapiens lethal (3) malignant brain tumor l(3)mbt protein (Drosophila) ho (H-L(3)MBT), transcript variant I, mRNA  |
| NM_004318 | Homo sapiens aspartate beta-hydroxylase (ASPH), transcript variant 1, mRNA   |
| NM_032468 | Homo sapiens aspartate beta-hydroxylase (ASPH), transcript variant 2, mRNA   |
| NM_032467 | Homo sapiens aspartate beta-hydroxylase (ASPH), transcript variant 4, mRNA   |
| NM_032466 | Homo sapiens aspartate beta-hydroxylase (ASPH), transcript variant 3, mRNA   |
| NM_020164 | Homo sapiens aspartate beta-hydroxylase (ASPH), transcript variant 5, mRNA   |
| NM_014217 | Homo sapiens potassium channel, subfamily K, member 2 (TREK-1) (KCNK2), mRNA   |
| NM_031498 | Homo sapiens guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2 (GNGT2), mRNA    |

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| NM_031311 | Homo sapiens carboxypeptidase, vitellogenic-like (CPVL), mRNA   |
| NM_022768 | Homo sapiens RNA binding motif protein 15 (RBM15), mRNA   |
| NM_021797 | Homo sapiens eosinophil chemotactic cytokine (TSA1902), mRNA  |
| NM_014330 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 15A (PPP1R15A), mRNA   |
| NM_014522 | Homo sapiens protocadherin 11 (PCDH11), transcript variant a, mRNA  |
| NM_003004 | Homo sapiens secreted and transmembrane 1 (SECTM1), mRNA  |
| NM_002696 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide G (POLR2G), mRNA  |
| NM_000938 | Homo sapiens polymerase (RNA) II (DNA directed) polypeptide B (140kD) (POLR2B), mRNA  |
| NM_001372 | Homo sapiens dynein, axonemal, heavy polypeptide 9 (DNAH9), transcript variant 2, mRNA  |
| NM_004215 | Homo sapiens estrogen receptor binding site associated, antigen, 9 (EBAG9), mRNA  |
| NM_005111 | Homo sapiens crystallin, zeta (quinone reductase)-like 1 (CRYZL1), mRNA   |
| NM_004381 | Homo sapiens cAMP responsive element binding protein-like 1 (CREBL1), mRNA  |
| NM_000592 | Homo sapiens complement component 4B (C4B), mRNA  |
| NM_007293 | Homo sapiens complement component 4A (C4A), mRNA  |
| NM_032603 | Homo sapiens lysyl oxidase-like 3 (LOXL3), mRNA   |
| NM_023937 | Homo sapiens mitochondrial ribosomal protein L34 (MRPL34), mRNA   |
| NM_022567 | Homo sapiens nyctalopin (NYX), mRNA   |
| NM_022467 | Homo sapiens carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 8 (CHST8), mRNA  |
| NM_016557 | Homo sapiens orphan seven-transmembrane receptor, chemokine related (VSHK1), mRNA   |
| NM_016116 | Homo sapiens ankyrin repeat and SOCS box-containing 4 (ASB4), mRNA  |
| NM_016114 | Homo sapiens ankyrin repeat and SOCS box-containing 1 (ASB1), mRNA  |
| NM_016115 | Homo sapiens ankyrin repeat and SOCS box-containing 3 (ASB3), mRNA  |
| NM_014398 | Homo sapiens lysosomal-associated membrane protein 3 (LAMP3), mRNA  |
| NM_014434 | Homo sapiens NADPH-dependent FMN and FAD containing oxidoreductase (NR1), mRNA  |
| NM_004860 | Homo sapiens fragile X mental retardation, autosomal homolog 2 (FXR2), mRNA   |
| NM_006850 | Homo sapiens interleukin 24 (IL24), mRNA  |
| NM_006541 | Homo sapiens thioredoxin-like 2 (TXNL2), mRNA   |
| NM_004662 | Homo sapiens dynein, axonemal, heavy polypeptide 9 (DNAH9), transcript variant 1, mRNA  |
| NM_000029 | Homo sapiens angiotensinogen (serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 8) (AGT), mRNA |
| NM_004050 | Homo sapiens BCL2-like 2 (BCL2L2), mRNA   |
| NM_004049 | Homo sapiens BCL2-related protein A1 (BCL2A1), mRNA   |
| NM_001623 | Homo sapiens allograft inflammatory factor 1 (AIF1), transcript variant 3, mRNA   |
| NM_032955 | Homo sapiens allograft inflammatory factor 1 (AIF1), transcript variant 1, mRNA   |
| NG_000010 | Homo sapiens genomic cytochrome P450, subfamily IIA (phenobarbital-inducible) (CYP2A.2@) on chromosome 19                                     |
| NM_004847 | Homo sapiens allograft inflammatory factor 1 (AIF1), transcript variant 2, mRNA   |
| NM_005452 | Homo sapiens chromosome 6 open reading frame 11 (C6orf11), mRNA   |

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| NM_031282 | Homo sapiens immunoglobulin superfamily receptor translocation associated 1 (IRTA1), mRNA           |
| NM_031281 | Homo sapiens immunoglobulin superfamily receptor translocation associated 2 (IRTA2), mRNA           |
| NM_000767 | Homo sapiens cytochrome P450, subfamily IIB (phenobarbital-inducible), polypeptide 6 (CYP2B6), mRNA |
| NM_020165 | Homo sapiens postreplication repair protein hRAD18p (RAD18), mRNA                                   |
| NM_001710 | Homo sapiens B-factor, properdin (BF), mRNA   |
| NM_021800 | Homo sapiens J domain containing protein 1 (JDPI), mRNA   |
| NM_020404 | Homo sapiens tumor endothelial marker 1 precursor (TEM1), mRNA                                      |
| NM_006672 | Homo sapiens solute carrier family 22 (organic anion transporter), member 7 (SLC22A7), mRNA         |
| NM_006398 | Homo sapiens diubiquitin (UBD), mRNA  |
| NM_005445 | Homo sapiens chondroitin sulfate proteoglycan 6 (bamacan) (CSPG6), mRNA                             |
| NM_017495 | Homo sapiens seb4D (HSRNASEB), mRNA   |
| NM_001632 | Homo sapiens alkaline phosphatase, placental (Regan isozyme) (ALPP), mRNA                           |
| NM_030773 | Homo sapiens beta tubulin 1, class VI (TUBB1), mRNA   |
| NM_020643 | Homo sapiens chromosome 11 open reading frame 16 (C11orf16), mRNA                                   |
| NM_020644 | Homo sapiens chromosome 11 open reading frame 15 (C11orf15), mRNA                                   |
| NM_020642 | Homo sapiens chromosome 11 open reading frame 17 (C11orf17), mRNA                                   |
| NM_020201 | Homo sapiens 5' nucleotidase, mitochondrial (NT5M), mRNA  |
| NM_003203 | Homo sapiens chromosome 2 open reading frame 3 (C2orf3), mRNA                                       |
| NM_007175 | Homo sapiens chromosome 8 open reading frame 2 (C8orf2), mRNA                                       |
| NM_007023 | Homo sapiens cAMP-regulated guanine nucleotide exchange factor II (CAMP-GEFII), mRNA                |
| NM_006589 | Homo sapiens chromosome 1 open reading frame 2 (C1orf2), mRNA                                       |
| NM_006105 | Homo sapiens Rap1 guanine-nucleotide-exchange factor directly activated by cA (EPAC), mRNA          |
| NM_005637 | Homo sapiens synovial sarcoma translocation, chromosome 18 (SS18), mRNA                             |
| NM_001213 | Homo sapiens chromosome 1 open reading frame 1 (C1orf1), mRNA                                       |
| NM_002354 | Homo sapiens tumor-associated calcium signal transducer 1 (TACSTD1), mRNA                           |
| NM_003492 | Homo sapiens chromosome X open reading frame 12 (CXorf12), mRNA                                     |
| NM_003797 | Homo sapiens embryonic ectoderm development (EED), mRNA   |
| NM_032863 | Homo sapiens hypothetical protein FLJ14927 (FLJ14927), mRNA   |
| NM_032813 | Homo sapiens hypothetical protein FLJ14624 (FLJ14624), mRNA   |
| NM_032578 | Homo sapiens myopalladin (FLJ14437), mRNA   |
| NM_032385 | Homo sapiens chromosome 5 open reading frame 4 (C5orf4), mRNA                                       |
| NM_032239 | Homo sapiens hypothetical protein FLJ23511 (FLJ23511), mRNA   |
| NM_032012 | Homo sapiens chromosome 9 open reading frame 5 (C9orf5), mRNA                                       |
| NM_031922 | Homo sapiens RALBP1 protein (LOC83859), mRNA  |
| NM_031890 | Homo sapiens cat eye syndrome chromosome region, candidate 6 (CECR6), mRNA                          |
| NM_031456 | Homo sapiens chromosome 17 open reading frame 1A (C17orf1A), mRNA                                   |
| NM_030944 | Homo sapiens chromosome 15 open reading frame 5 (C15orf5), mRNA                                     |
| NM_030806 | Homo sapiens chromosome 1 open reading frame 21 (C1orf21), mRNA                                     |
| NM_030790 | Homo sapiens hypothetical protein CDA08 (CDA08), mRNA   |
| NM_018312 | Homo sapiens chromosome 11 open reading frame 23 (C11orf23), mRNA                                   |
| NM_024298 | Homo sapiens malignant cell expression-enhanced gene/tumor progression-enhanc (LENG4), mRNA         |
| NM_022458 | Homo sapiens chromosome 7 open reading frame 2 (C7orf2), mRNA                                       |
| NM_022338 | Homo sapiens chromosome 11 open reading frame 24 (C11orf24), mRNA                                   |

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| NM_022163 | Homo sapiens chromosome 15 open reading frame 4 (C15orf4), mRNA  |
| NM_022107 | Homo sapiens chromosome 6 open reading frame 9 (C6orf9), mRNA  |
| NM_006781 | Homo sapiens chromosome 6 open reading frame 10 (C6orf10), mRNA  |
| NM_019895 | Homo sapiens chromosome 3 open reading frame 4 (C3orf4), mRNA  |
| NM_012265 | Homo sapiens chromosome 22 open reading frame 3 (C22orf3), mRNA  |
| NM_021254 | Homo sapiens chromosome 21 open reading frame 59 (C21orf59), mRNA  |
| NM_020645 | Homo sapiens chromosome 11 open reading frame 14 (C11orf14), mRNA  |
| NM_012112 | Homo sapiens chromosome 20 open reading frame 1 (C20orf1), mRNA  |
| NM_018555 | Homo sapiens zinc finger protein 331; zinc finger protein 463 (ZNF361), mRNA                             |
| NM_019106 | Homo sapiens septin 3 (SEPT3), mRNA  |
| NM_020375 | Homo sapiens chromosome 12 open reading frame 5 (C12orf5), mRNA  |
| NM_020374 | Homo sapiens chromosome 12 open reading frame 4 (C12orf4), mRNA  |
| NM_020373 | Homo sapiens chromosome 12 open reading frame 3 (C12orf3), mRNA  |
| NM_020367 | Homo sapiens chromosome 12 open reading frame 6 (C12orf6), mRNA  |
| NM_020130 | Homo sapiens chromosome 8 open reading frame 4 (C8orf4), mRNA  |
| NM_019596 | Homo sapiens chromosome 21 open reading frame 62 (C21orf62), mRNA  |
| NM_019063 | Homo sapiens chromosome 2 open reading frame 2 (C2orf2), mRNA  |
| NM_018956 | Homo sapiens chromosome 9 open reading frame 9 (C9orf9), mRNA  |
| NM_017586 | Homo sapiens chromosome 9 open reading frame 7 (C9orf7), mRNA  |
| NM_018691 | Homo sapiens chromosome 5 open reading frame 3 (C5orf3), mRNA  |
| NM_006134 | Homo sapiens chromosome 21 open reading frame 4 (C21orf4), mRNA  |
| NM_016940 | Homo sapiens chromosome 21 open reading frame 6 (C21orf6), mRNA  |
| NM_017438 | Homo sapiens chromosome 21 open reading frame 18 (C21orf18), mRNA  |
| NM_013265 | Homo sapiens chromosome 11 open reading frame 2 (C11orf2), mRNA  |
| NM_016190 | Homo sapiens chromosome 1 open reading frame 10 (C1orf10), mRNA  |
| NM_015927 | Homo sapiens transforming growth factor beta 1 induced transcript 1 (TGFB1I1), mRNA                      |
| NM_016564 | Homo sapiens BM88 antigen (BM88), mRNA   |
| NM_016348 | Homo sapiens chromosome 5 open reading frame 4 (C5orf4), mRNA  |
| NM_014009 | Homo sapiens immune dysregulation, polyendocrinopathy, enteropathy, X-linked (IPEX), mRNA                |
| NM_015524 | Homo sapiens chromosome 6 open reading frame 5 (C6orf5), mRNA  |
| NM_006345 | Homo sapiens chromosome 4 open reading frame 1 (C4orf1), mRNA  |
| NM_015373 | Homo sapiens chromosome 22 open reading frame 2 (C22orf2), mRNA  |
| NM_014205 | Homo sapiens chromosome 11 open reading frame 5 (C11orf5), mRNA  |
| NM_012264 | Homo sapiens chromosome 22 open reading frame 5 (C22orf5), mRNA  |
| NM_012111 | Homo sapiens chromosome 14 open reading frame 3 (C14orf3), mRNA  |
| NM_007211 | Homo sapiens chromosome 12 open reading frame 2 (C12orf2), mRNA  |
| NM_007176 | Homo sapiens chromosome 14 open reading frame 1 (C14orf1), mRNA  |
| NM_006706 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, S, 150kD (TAF2S), mRNA |
| NM_006382 | Homo sapiens chromosome 17 open reading frame 1A (C17orf1A), mRNA  |
| NM_005967 | Homo sapiens NGFI-A binding protein 2 (EGR1 binding protein 2) (NAB2), mRNA                              |
| NM_005966 | Homo sapiens NGFI-A binding protein 1 (EGR1 binding protein 1) (NAB1), mRNA                              |
| NM_005663 | Homo sapiens Wolf-Hirschhorn syndrome candidate 2 (WHSC2), mRNA  |
| NM_005491 | Homo sapiens chromosome X open reading frame 6 (CXorf6), mRNA  |
| NM_005128 | Homo sapiens chromosome 21 open reading frame 5 (C21orf5), mRNA  |
| NM_004928 | Homo sapiens chromosome 21 open reading frame 2 (C21orf2), mRNA  |
| NM_004894 | Homo sapiens chromosome 14 open reading frame 2 (C14orf2), mRNA  |
| NM_004872 | Homo sapiens chromosome 1 open reading frame 8 (C1orf8), mRNA  |

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| NM_004709 | Homo sapiens chromosome X open reading frame 1 (CXorf1), mRNA                                    |
| NM_004337 | Homo sapiens chromosome 8 open reading frame 1 (C8orf1), mRNA                                    |
| NM_004913 | Homo sapiens chromosome 16 open reading frame 7 (C16orf7), mRNA                                  |
| NM_000956 | Homo sapiens prostaglandin E receptor 2 (subtype EP2), 53kD (PTGER2), mRNA                       |
| NM_001586 | Homo sapiens chromosome X open reading frame 2 (CXorf2), mRNA                                    |
| NM_001585 | Homo sapiens chromosome 22 open reading frame 1 (C22orf1), mRNA                                  |
| NM_001214 | Homo sapiens chromosome 16 open reading frame 3 (C16orf3), mRNA                                  |
| NM_001584 | Homo sapiens chromosome 11 open reading frame 8 (C11orf8), mRNA                                  |
| NM_003475 | Homo sapiens chromosome 11 open reading frame 13 (C11orf13), mRNA                                |
| NM_032496 | Homo sapiens rho-gtpase activating protein ARHGAP9 (ARHGAP9), mRNA                               |
| NM_007234 | Homo sapiens dynactin 3 (p22) (DCTN3), transcript variant 1, mRNA                                |
| NM_024348 | Homo sapiens dynactin 3 (p22) (DCTN3), transcript variant 2, mRNA                                |
| NM_021246 | Homo sapiens megakaryocyte-enhanced gene transcript 1 protein (MEGT1), mRNA                      |
| NM_013291 | Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA         |
| NM_014500 | Homo sapiens HIV TAT specific factor 1 (HTATSF1), mRNA   |
| NM_005567 | Homo sapiens lectin, galactoside-binding, soluble, 3 binding protein (LGALS3BP), mRNA            |
| NM_005711 | Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA                       |
| NM_016593 | Homo sapiens oxysterol 7alpha-hydroxylase (CYP39A1), mRNA  |
| NM_021048 | Homo sapiens melanoma antigen, family A, 10 (MAGEA10), mRNA                                      |
| NM_021049 | Homo sapiens melanoma antigen, family A, 5 (MAGEA5), mRNA  |
| NM_019602 | Homo sapiens butyrophilin-like 2 (MHC class II associated) (BTNL2), mRNA                         |
| NM_018002 | Homo sapiens oxidation resistance 1 (OXR1), mRNA   |
| NM_013392 | Homo sapiens nuclear receptor binding protein (NRBP), mRNA                                       |
| NM_012396 | Homo sapiens pleckstrin homology-like domain, family A, member 3 (PHLDA3), mRNA                  |
| NM_006492 | Homo sapiens aristaless-like homeobox 3 (ALX3), mRNA   |
| NM_005365 | Homo sapiens melanoma antigen, family A, 9 (MAGEA9), mRNA  |
| NM_005364 | Homo sapiens melanoma antigen, family A, 8 (MAGEA8), mRNA  |
| NM_005366 | Homo sapiens melanoma antigen, family A, 11 (MAGEA11), mRNA                                      |
| NM_024490 | Homo sapiens ATPase, Class V, type 10C (ATP10C), mRNA  |
| NM_020354 | Homo sapiens lysosomal apyrase-like protein 1 (LALP1), mRNA                                      |
| NM_018655 | Homo sapiens lens epithelial protein (LENEP), mRNA   |
| NM_016448 | Homo sapiens RA-regulated nuclear matrix-associated protein (RAMP), mRNA                         |
| NM_014763 | Homo sapiens mitochondrial ribosomal protein L19 (MRPL19), mRNA                                  |
| NM_006099 | Homo sapiens protein inhibitor of activated STAT3 (PIAS3), mRNA                                  |
| NM_004221 | Homo sapiens natural killer cell transcript 4 (NK4), mRNA  |
| NM_002949 | Homo sapiens mitochondrial ribosomal protein L12 (MRPL12), mRNA                                  |
| NM_016239 | Homo sapiens myosin XVA (MYO15A), mRNA   |
| NM_005094 | Homo sapiens solute carrier family 27 (fatty acid transporter), member 4 (SLC27A4), mRNA         |
| NM_015077 | Homo sapiens sterile alpha and HEAT/Armadillo motif protein, ortholog of Drosophila (SARM), mRNA |
| NM_013239 | Homo sapiens protein phosphatase 2A 48 kDa regulatory subunit (PR48), mRNA                       |
| NM_022363 | Homo sapiens LIM homeobox protein 5 (LHX5), mRNA   |
| NM_031966 | Homo sapiens cyclin B1 (CCNB1), mRNA   |
| NM_015559 | Homo sapiens SET binding protein 1 (SETBP1), mRNA  |
| NM_007178 | Homo sapiens unr-interacting protein (UNRIP), mRNA   |
| NM_005367 | Homo sapiens melanoma antigen, family A, 12 (MAGEA12), mRNA                                      |

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| NM_031275 | Homo sapiens testis expressed sequence 12 (TEX12), mRNA   |
| NM_032403 | Homo sapiens protocadherin gamma subfamily C, 3 (PCDHGC3), transcript variant 3, mRNA           |
| NM_032402 | Homo sapiens protocadherin gamma subfamily C, 3 (PCDHGC3), transcript variant 2, mRNA           |
| NM_002588 | Homo sapiens protocadherin gamma subfamily C, 3 (PCDHGC3), transcript variant 1, mRNA           |
| NM_014583 | Homo sapiens LIM and cysteine-rich domains 1 (LMCD1), mRNA                                      |
| NM_001389 | Homo sapiens Down syndrome cell adhesion molecule (DSCAM), mRNA                                 |
| NM_031894 | Homo sapiens ferritin, heavy polypeptide-like 17 (FTHL17), mRNA                                 |
| NM_032098 | Homo sapiens protocadherin gamma subfamily B, 4 (PCDHGB4), transcript variant 2, mRNA           |
| NM_003736 | Homo sapiens protocadherin gamma subfamily B, 4 (PCDHGB4), transcript variant 1, mRNA           |
| NM_032938 | Homo sapiens G protein pathway suppressor 2 (GPS2), transcript variant 3, mRNA                  |
| NM_004489 | Homo sapiens G protein pathway suppressor 2 (GPS2), transcript variant 2, mRNA                  |
| NM_032442 | Homo sapiens G protein pathway suppressor 2 (GPS2), transcript variant 1, mRNA                  |
| NM_001887 | Homo sapiens crystallin, beta B1 (CRYBB1), mRNA   |
| NM_005208 | Homo sapiens crystallin, beta A1 (CRYBA1), mRNA   |
| NM_001889 | Homo sapiens crystallin, zeta (quinone reductase) (CRYZ), mRNA                                  |
| NM_022132 | Homo sapiens methylcrotonoyl-Coenzyme A carboxylase 2 (beta) (MCCC2), mRNA                      |
| NM_001288 | Homo sapiens chloride intracellular channel 1 (CLIC1), mRNA                                     |
| NM_021624 | Homo sapiens histamine H4 receptor (HRH4), mRNA   |
| NM_032527 | Homo sapiens hypothetical protein FLJ14972 (KIAA1847), mRNA                                     |
| NM_005560 | Homo sapiens laminin, alpha 5 (LAMA5), mRNA   |
| NM_032931 | Homo sapiens hypothetical protein MGC13219 (MGC13219), mRNA                                     |
| NM_032924 | Homo sapiens hypothetical protein MGC16040 (MGC16040), mRNA                                     |
| NM_032920 | Homo sapiens hypothetical protein MGC15873 (MGC15873), mRNA                                     |
| NM_032913 | Homo sapiens hypothetical protein MGC14458 (MGC14458), mRNA                                     |
| NM_032893 | Homo sapiens hypothetical protein MGC14336 (MGC14336), mRNA                                     |
| NM_032889 | Homo sapiens hypothetical protein MGC11308 (MGC11308), mRNA                                     |
| NM_032815 | Homo sapiens hypothetical protein FLJ14639 (FLJ14639), mRNA                                     |
| NM_032798 | Homo sapiens hypothetical protein FLJ14503 (FLJ14503), mRNA                                     |
| NM_032793 | Homo sapiens hypothetical protein FLJ14490 (FLJ14490), mRNA                                     |
| NM_032791 | Homo sapiens hypothetical protein FLJ14477 (FLJ14477), mRNA                                     |
| NM_032789 | Homo sapiens hypothetical protein FLJ14464 (FLJ14464), mRNA                                     |
| NM_032769 | Homo sapiens hypothetical protein MGC16212 (MGC16212), mRNA                                     |
| NM_032760 | Homo sapiens hypothetical protein MGC14966 (MGC14966), mRNA                                     |
| NM_032696 | Homo sapiens hypothetical protein MGC12262 (MGC12262), mRNA                                     |
| NM_032665 | Homo sapiens hypothetical protein MGC4640 (MGC4640), mRNA                                       |
| NM_032662 | Homo sapiens hypothetical protein MGC10600 (MGC10600), mRNA                                     |
| NM_032655 | Homo sapiens hypothetical protein MGC10997 (MGC10997), mRNA                                     |
| NM_032625 | Homo sapiens hypothetical brain protein my040 (MY040), mRNA                                     |
| NM_032621 | Homo sapiens X-linked protein (DJ79P11.1), mRNA   |
| NM_032525 | Homo sapiens tubulin beta-5 (TUBB5), mRNA   |
| NM_005485 | Homo sapiens ADP-ribosyltransferase (NAD+; poly (ADP-ribose) polymerase)-like 3 (ADPRTL3), mRNA |
| NM_005484 | Homo sapiens ADP-ribosyltransferase (NAD+; poly(ADP-ribose) polymerase)-                        |



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|           | like 2 (ADPRTL2), mRNA   |
| NM_005447 | Homo sapiens peptidylglycine alpha-amidating monooxygenase COOH-terminal interactor (PAMCI), mRNA                                    |
| NM_000137 | Homo sapiens fumarylacetoacetate hydrolase (fumarylacetoacetase) (FAH), mRNA   |
| NM_001888 | Homo sapiens crystallin, mu (CRYM), mRNA   |
| NM_032608 | Homo sapiens hypothetical protein bk125H2.1 (BK125H2.1), mRNA  |
| NM_032607 | Homo sapiens CREB/ATF family transcription factor (CREB-H), mRNA   |
| NM_032602 | Homo sapiens connexin 62 (CX62), mRNA  |
| NM_032598 | Homo sapiens testes development-related NYD-SP20 (NYD-SP20), mRNA  |
| NM_032592 | Homo sapiens 1-aminocyclopropane-1-carboxylate synthase (PHACS), mRNA  |
| NM_032581 | Homo sapiens down-regulated by Cttnb1, a (DRCTNNB1A), mRNA   |
| NM_032579 | Homo sapiens colon and small intestine-specific cysteine-rich protein precursor similar to FIZZ2/resistin-like protein (HXCP2), mRNA |
| NM_032570 | Homo sapiens NPC-related protein NAG73 (NAG73), mRNA   |
| NM_032565 | Homo sapiens emopamil binding related protein, delta8-delta7 sterol isomerase related protein (EBRP), mRNA                           |
| NM_032561 | Homo sapiens EVG1 protein (EVG1), mRNA   |
| NM_032555 | Homo sapiens P143 protein (P143), mRNA   |
| NM_032549 | Homo sapiens inner mitochondrial membrane peptidase 2 like (IMMP2L), mRNA  |
| NM_032548 | Homo sapiens BPOZ protein (BPOZ), mRNA   |
| NM_015080 | Homo sapiens neurexin 2 (NRXN2), mRNA  |
| NM_005676 | Homo sapiens RNA binding motif protein 10 (RBM10), mRNA  |
| NM_032526 | Homo sapiens cytosolic nucleotidase I (CN-I), mRNA   |
| NM_032483 | Homo sapiens HTPAP protein (HTPAP), mRNA   |
| NM_032094 | Homo sapiens protocadherin gamma subfamily A, 12 (PCDHGA12), transcript variant 2, mRNA  |
| NM_003735 | Homo sapiens protocadherin gamma subfamily A, 12 (PCDHGA12), transcript variant 1, mRNA  |
| NM_031887 | Homo sapiens pro-melanin-concentrating hormone-like 1 (PMCHL1), mRNA   |
| NM_032461 | Homo sapiens SPANX family, member B1 (SPANXB1), mRNA   |
| NM_006986 | Homo sapiens melanoma antigen, family D, 1 (MAGED1), mRNA  |
| NM_005462 | Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA  |
| NM_002375 | Homo sapiens microtubule-associated protein 4 (MAP4), transcript variant 1, mRNA   |
| NM_030983 | Homo sapiens microtubule-associated protein 4 (MAP4), transcript variant 4, mRNA   |
| NM_030885 | Homo sapiens microtubule-associated protein 4 (MAP4), transcript variant 3, mRNA   |
| NM_030884 | Homo sapiens microtubule-associated protein 4 (MAP4), transcript variant 2, mRNA   |
| NM_002374 | Homo sapiens microtubule-associated protein 2 (MAP2), transcript variant 1, mRNA   |
| NM_031847 | Homo sapiens microtubule-associated protein 2 (MAP2), transcript variant 4, mRNA   |
| NM_031846 | Homo sapiens microtubule-associated protein 2 (MAP2), transcript variant 3, mRNA   |
| NM_031845 | Homo sapiens microtubule-associated protein 2 (MAP2), transcript variant 2, mRNA   |
| NM_032446 | Homo sapiens MEGF10 protein (MEGF10), mRNA   |
| NM_032417 | Homo sapiens SPANX family, member D (SPANXD), mRNA   |

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| NM_013453 | Homo sapiens sperm protein associated with the nucleus, X chromosome, family member A1 (SPANXA1), mRNA |
| NM_020690 | Homo sapiens KIAA1085 protein (KIAA1085), mRNA   |
| NM_012121 | Homo sapiens Cdc42 effector protein 4; binder of Rho GTPases 4 (CEP4), mRNA                            |
| NM_001019 | Homo sapiens ribosomal protein S15a (RPS15A), mRNA   |
| NM_022551 | Homo sapiens ribosomal protein S18 (RPS18), mRNA   |
| NM_005909 | Homo sapiens microtubule-associated protein 1B (MAP1B), transcript variant 1, mRNA                     |
| NM_032010 | Homo sapiens microtubule-associated protein 1B (MAP1B), transcript variant 2, mRNA                     |
| NM_002373 | Homo sapiens microtubule-associated protein 1A (MAP1A), mRNA   |
| NM_031366 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 6, mRNA     |
| NM_031365 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 5, mRNA     |
| NM_031364 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 4, mRNA     |
| NM_031363 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 3, mRNA     |
| NM_031362 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 2, mRNA     |
| NM_000091 | Homo sapiens collagen, type IV, alpha 3 (Goodpasture antigen) (COL4A3), transcript variant 1, mRNA     |
| NM_002140 | Homo sapiens heterogeneous nuclear ribonucleoprotein K (HNRPK), transcript variant 1, mRNA             |
| NM_031263 | Homo sapiens heterogeneous nuclear ribonucleoprotein K (HNRPK), transcript variant 3, mRNA             |
| NM_031262 | Homo sapiens heterogeneous nuclear ribonucleoprotein K (HNRPK), transcript variant 2, mRNA             |
| NM_032414 | Homo sapiens prokineticin 1 precursor (PROK1), mRNA  |
| NM_003214 | Homo sapiens TEA domain family member 3 (TEAD3), mRNA  |
| NM_015613 | Homo sapiens DKFZP434K091 protein (PAL), mRNA  |
| NM_030643 | Homo sapiens apolipoprotein L, 4 (APOL4), mRNA   |
| NM_022064 | Homo sapiens hypothetical protein FLJ12565 (FLJ12565), mRNA  |
| NM_017971 | Homo sapiens mitochondrial ribosomal protein L20 (MRPL20), mRNA  |
| NM_016504 | Homo sapiens mitochondrial ribosomal protein L27 (MRPL27), mRNA  |
| NM_014050 | Homo sapiens mitochondrial ribosomal protein L42 (MRPL42), mRNA  |
| NM_000014 | Homo sapiens alpha-2-macroglobulin (A2M), mRNA   |
| NM_004891 | Homo sapiens mitochondrial ribosomal protein L33 (MRPL33), mRNA  |
| NM_004864 | Homo sapiens prostate differentiation factor (PLAB), mRNA  |
| NM_000454 | Homo sapiens superoxide dismutase 1, soluble (amyotrophic lateral sclerosis 1 (adult)) (SOD1), mRNA    |
| NM_032391 | Homo sapiens small nuclear protein PRAC (PRAC), mRNA   |
| NM_032382 | Homo sapiens hypothetical protein FLJ22315 (FLJ22315), mRNA  |
| NM_032365 | Homo sapiens hypothetical protein MGC5254 (MGC5254), mRNA  |
| NM_032363 | Homo sapiens HEIL2 protein (HEIL2), mRNA   |
| NM_032335 | Homo sapiens hypothetical protein MGC14797 (MGC14797), mRNA  |
| NM_032276 | Homo sapiens hypothetical protein DKFZp547E052 (DKFZp547E052), mRNA                                    |
| NM_032272 | Homo sapiens hypothetical protein DKFZp586G1123 (DKFZp586G1123), mRNA                                  |
| NM_032260 | Homo sapiens hypothetical protein DKFZp434P144 (DKFZp434P144), mRNA                                    |

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| NM_032237 | Homo sapiens hypothetical protein FLJ23356 (FLJ23356), mRNA  |
| NM_032220 | Homo sapiens hypothetical protein FLJ22283 (FLJ22283), mRNA  |
| NM_032219 | Homo sapiens hypothetical protein FLJ22269 (FLJ22269), mRNA  |
| NM_032204 | Homo sapiens hypothetical protein FLJ21588 (FLJ21588), mRNA  |
| NM_032203 | Homo sapiens hypothetical protein FLJ21423 (FLJ21423), mRNA  |
| NM_032202 | Homo sapiens hypothetical protein FLJ21404 (FLJ21404), mRNA  |
| NM_032173 | Homo sapiens hypothetical protein FLJ12747 (FLJ12747), mRNA  |
| NM_032157 | Homo sapiens hypothetical protein FLJ11531 (FLJ11531), mRNA  |
| NM_032150 | Homo sapiens hypothetical protein DKFZp434P1735 (DKFZP434P1735), mRNA  |
| NM_021005 | Homo sapiens nuclear receptor subfamily 2, group F, member 2 (NR2F2), mRNA                                       |
| NM_020159 | Homo sapiens hypothetical protein DKFZp762K2015 (DKFZp762K2015), mRNA  |
| NM_015449 | Homo sapiens DKFZP586G1722 protein (DKFZP586G1722), mRNA   |
| NM_015424 | Homo sapiens DKFZP586N2124 protein (DKFZP586N2124), mRNA   |
| NM_015235 | Homo sapiens likely ortholog of mouse variant polyadenylation protein CSTF-64; KIAA0689 protein (KIAA0689), mRNA |
| NM_015068 | Homo sapiens paternally expressed 10 (PEG10), mRNA   |
| NM_014599 | Homo sapiens EH-domain containing 4 (EHD4), mRNA   |
| NM_014411 | Homo sapiens brain and nasopharyngeal carcinoma susceptibility protein (NSG-X), mRNA                             |
| NM_007148 | Homo sapiens zinc finger protein 179 (ZNF179), mRNA  |
| NM_007266 | Homo sapiens XPA binding protein 1; putative ATP(GTP)-binding protein (NTPBP), mRNA                              |
| NM_006313 | Homo sapiens ubiquitin specific protease 15 (USP15), mRNA  |
| NM_005726 | Homo sapiens Ts translation elongation factor, mitochondrial (TSFM), mRNA  |
| NM_005277 | Homo sapiens glycoprotein M6A (GPM6A), mRNA  |
| NM_005437 | Homo sapiens nuclear receptor coactivator 4 (NCOA4), mRNA  |
| NM_001439 | Homo sapiens exostoses (multiple)-like 2 (EXTL2), mRNA   |
| NM_001287 | Homo sapiens chloride channel 7 (CLCN7), mRNA  |
| NM_021194 | Homo sapiens solute carrier family 30 (zinc transporter), member 1 (SLC30A1), mRNA                               |
| NM_013986 | Homo sapiens Ewing sarcoma breakpoint region 1 (EWSR1), transcript variant EWS-b, mRNA                           |
| NM_001013 | Homo sapiens ribosomal protein S9 (RPS9), mRNA   |
| NM_005617 | Homo sapiens ribosomal protein S14 (RPS14), mRNA   |
| NM_006361 | Homo sapiens homeo box B13 (HOXB13), mRNA  |
| NM_000990 | Homo sapiens ribosomal protein L27a (RPL27A), mRNA   |
| NM_005821 | Homo sapiens NBR2 (NBR2), mRNA   |
| NM_003483 | Homo sapiens high-mobility group (nonhistone chromosomal) protein isoform I-C (HMGIC), mRNA                      |
| NM_002129 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 2 (HMG2), mRNA                                 |
| NM_005959 | Homo sapiens melatonin receptor 1B (MTNR1B), mRNA  |
| NM_005958 | Homo sapiens melatonin receptor 1A (MTNR1A), mRNA  |
| NM_004739 | Homo sapiens metastasis-associated 1-like 1 (MTA1L1), mRNA   |
| NM_021644 | Homo sapiens heterogeneous nuclear ribonucleoprotein H3 (2H9) (HNRPH3), transcript variant 2H9A, mRNA            |
| NM_012207 | Homo sapiens heterogeneous nuclear ribonucleoprotein H3 (2H9) (HNRPH3), transcript variant 2H9, mRNA             |
| NM_019597 | Homo sapiens heterogeneous nuclear ribonucleoprotein H2 (H') (HNRPH2),   |

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|           | mRNA   |
| NM_031203 | Homo sapiens heterogeneous nuclear ribonucleoprotein M (HNRPM), transcript variant 2, mRNA   |
| NM_005968 | Homo sapiens heterogeneous nuclear ribonucleoprotein M (HNRPM), transcript variant 1, mRNA   |
| NM_004966 | Homo sapiens heterogeneous nuclear ribonucleoprotein F (HNRPF), mRNA   |
| NM_032093 | Homo sapiens pregnancy-associated interferon (HTIFN), mRNA   |
| NM_020236 | Homo sapiens mitochondrial ribosomal protein L1 (MRPL1), mRNA  |
| NM_016050 | Homo sapiens mitochondrial ribosomal protein L11 (MRPL11), mRNA  |
| NM_005520 | Homo sapiens heterogeneous nuclear ribonucleoprotein H1 (H) (HNRPH1), mRNA   |
| NM_002226 | Homo sapiens jagged 2 (JAG2), mRNA   |
| NM_006805 | Homo sapiens heterogeneous nuclear ribonucleoprotein A0 (HNRPA0), mRNA   |
| NM_005463 | Homo sapiens heterogeneous nuclear ribonucleoprotein D-like (HNRPDL), transcript variant 1, mRNA                                       |
| NM_031372 | Homo sapiens heterogeneous nuclear ribonucleoprotein D-like (HNRPDL), transcript variant 2, mRNA                                       |
| NM_031313 | Homo sapiens alkaline phosphatase, placental-like 2 (ALPPL2), mRNA   |
| NM_005080 | Homo sapiens X-box binding protein 1 (XBP1), mRNA  |
| NM_031267 | Homo sapiens cell division cycle 2-like 5 (cholinesterase-related cell division controller) (CDC2L5), transcript variant 2, mRNA       |
| NM_003718 | Homo sapiens cell division cycle 2-like 5 (cholinesterase-related cell division controller) (CDC2L5), transcript variant 1, mRNA       |
| NM_000106 | Homo sapiens cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolizing), polypeptide 6 (CYP2D6), mRNA               |
| NM_031862 | Homo sapiens membrane component, chromosome 17, surface marker 2 (ovarian carcinoma antigen CA125) (M17S2), transcript variant 3, mRNA |
| NM_031858 | Homo sapiens membrane component, chromosome 17, surface marker 2 (ovarian carcinoma antigen CA125) (M17S2), transcript variant 2, mRNA |
| NM_005899 | Homo sapiens membrane component, chromosome 17, surface marker 2 (ovarian carcinoma antigen CA125) (M17S2), transcript variant 1, mRNA |
| NM_032018 | Homo sapiens hypothetical protein DKFZp547N043 (DKFZP547N043), mRNA  |
| NM_014469 | Homo sapiens testes-specific heterogenous nuclear ribonucleoprotein G-T (HNRNPG-T), mRNA   |
| NM_002137 | Homo sapiens heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1), transcript variant A2, mRNA                                     |
| NM_031243 | Homo sapiens heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1), transcript variant B1, mRNA                                     |
| NM_031157 | Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1), transcript variant 2, mRNA   |
| NM_009585 | Homo sapiens angiotensin receptor 1 (AGTR1), transcript variant 2, mRNA  |
| NM_032049 | Homo sapiens angiotensin receptor 1 (AGTR1), transcript variant 5, mRNA  |
| NM_031850 | Homo sapiens angiotensin receptor 1 (AGTR1), transcript variant 4, mRNA  |
| NM_004835 | Homo sapiens angiotensin receptor 1 (AGTR1), transcript variant 3, mRNA  |
| NM_000685 | Homo sapiens angiotensin receptor 1 (AGTR1), transcript variant 1, mRNA  |
| NM_003965 | Homo sapiens chemokine (C-C motif) receptor-like 2 (CCRL2), mRNA   |
| NM_006641 | Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), transcript variant B, mRNA   |
| NM_031200 | Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), transcript variant A, mRNA   |
| NM_031409 | Homo sapiens chemokine (C-C motif) receptor 6 (CCR6), transcript variant 2, mRNA   |

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| NM_004367 | Homo sapiens chemokine (C-C motif) receptor 6 (CCR6), transcript variant 1, mRNA   |
| NM_031371 | Homo sapiens RBP1-like protein (BCAA), transcript variant 2, mRNA  |
| NM_016374 | Homo sapiens RBP1-like protein (BCAA), transcript variant 1, mRNA  |
| NM_004281 | Homo sapiens BCL2-associated athanogene 3 (BAG3), mRNA   |
| NM_032048 | Homo sapiens extracellular glycoprotein EMILIN-2 precursor (EMILIN-2), mRNA  |
| NM_032046 | Homo sapiens mosaic serine protease (MSP), mRNA  |
| NM_032045 | Homo sapiens kringle-containing transmembrane protein; kringle-coding gene marking the eye and the nose (KREMEN), mRNA                                   |
| NM_032044 | Homo sapiens regenerating gene type IV (REG-IV), mRNA  |
| NM_032041 | Homo sapiens neurocalcin delta (NCALD), mRNA   |
| NM_032039 | Homo sapiens hypothetical protein DKFZp761D0211 (DKFZP761D0211), mRNA  |
| NM_032038 | Homo sapiens spinster-like protein (LOC83985), mRNA  |
| NM_032020 | Homo sapiens hypothetical protein MGC1314 similar to fucosidase, alpha-L- 1, tissue (MGC1314), mRNA  |
| NM_032016 | Homo sapiens hypothetical protein MGC3251 (MGC3251), mRNA  |
| NM_000323 | Homo sapiens ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 1, mRNA |
| NM_020975 | Homo sapiens ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 2, mRNA |
| NM_020630 | Homo sapiens ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 4, mRNA |
| NM_020629 | Homo sapiens ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease) (RET), transcript variant 3, mRNA |
| NM_016817 | Homo sapiens 2'-5'-oligoadenylate synthetase 2 (69-71 kD) (OAS2), transcript variant 1, mRNA   |
| NM_006187 | Homo sapiens 2'-5'-oligoadenylate synthetase 3 (100 kD) (OAS3), mRNA   |
| NM_002535 | Homo sapiens 2'-5'-oligoadenylate synthetase 2 (69-71 kD) (OAS2), transcript variant 2, mRNA   |
| NM_002342 | Homo sapiens lymphotoxin beta receptor (TNFR superfamily, member 3) (LTBR), mRNA   |
| NM_002136 | Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1), transcript variant 1, mRNA   |
| NM_001885 | Homo sapiens crystallin, alpha B (CRYAB), mRNA   |
| NM_015139 | Homo sapiens UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter (UGTREL7), mRNA  |
| NM_024333 | Homo sapiens fibronectin type 3 and SPRY domain-containing protein (FSD1), mRNA  |
| NM_017947 | Homo sapiens molybdenum cofactor sulfurase (HMCS), mRNA  |
| NM_017934 | Homo sapiens pleckstrin homology domain interacting protein (PHIP), mRNA   |
| NM_016492 | Homo sapiens homolog of yeast MOG1 (MOG1), mRNA  |
| NM_014185 | Homo sapiens homolog of yeast MOG1 (MOG1), mRNA  |
| NM_031965 | Homo sapiens haspin (GSG2), mRNA   |
| NM_031952 | Homo sapiens NYD-SP16 protein (NYD-SP16), mRNA   |
| NM_031950 | Homo sapiens Ksp37 protein (KSP37), mRNA   |
| NM_031949 | Homo sapiens NYD-TSPG protein (NYD-TSPG), mRNA   |
| NM_031945 | Homo sapiens oculospanin (OCSPI), mRNA   |
| NM_031943 | Homo sapiens IFP38 (IFP38), mRNA   |
| NM_031942 | Homo sapiens c-Myc target JPO1 (JPO1), mRNA  |
| NM_031941 | Homo sapiens AIE-75 binding protein protein (MCC2), mRNA   |

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| NM_031938 | Homo sapiens putative b,b-carotene-9',10'-dioxygenase (B-DIOX-II), mRNA                        |
| NM_031937 | Homo sapiens EBP50-PDZ interactor of 64 kD (EPI64), mRNA                                       |
| NM_031921 | Homo sapiens AAA-ATPase TOB3 (TOB3), mRNA  |
| NM_031915 | Homo sapiens CLLL8 protein (CLLD8), mRNA   |
| NM_031911 | Homo sapiens complement-c1q tumor necrosis factor-related protein 7 (CTRP7), mRNA              |
| NM_031910 | Homo sapiens complement-c1q tumor necrosis factor-related protein 6 (CTRP6), mRNA              |
| NM_031909 | Homo sapiens complement-c1q tumor necrosis factor-related protein 4 (CTRP4), mRNA              |
| NM_031904 | Homo sapiens hypothetical protein FKSG44 (FKSG44), mRNA  |
| NM_031903 | Homo sapiens mitochondrial ribosomal protein L32 (MRPL32), mRNA                                |
| NM_031900 | Homo sapiens alanine-glyoxylate aminotransferase 2 (AGXT2), mRNA                               |
| NM_031897 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 6 (CACNG6), mRNA                |
| NM_031896 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 7 (CACNG7), mRNA                |
| NM_031939 | Homo sapiens B29 protein (B29), mRNA   |
| NM_031886 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 7 (KCNA7), mRNA |
| NM_020992 | Homo sapiens PDZ and LIM domain 1 (elfin) (PDLIM1), mRNA                                       |
| NM_031407 | Homo sapiens upstream regulatory element binding protein 1 (UREB1), mRNA                       |
| NM_030582 | Homo sapiens collagen, type XVIII, alpha 1 (COL18A1), mRNA                                     |
| NM_020390 | Homo sapiens eukaryotic translation initiation factor 5A2 (EIF5A2), mRNA                       |
| NM_018980 | Homo sapiens taste receptor, type 2, member 5 (TAS2R5), mRNA                                   |
| NM_018417 | Homo sapiens soluble adenylyl cyclase (SAC), mRNA  |
| NM_016945 | Homo sapiens taste receptor, type 2, member 16 (TAS2R16), mRNA                                 |
| NM_004775 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 6 (B4GALT6), mRNA |
| NM_003778 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4 (B4GALT4), mRNA |
| NM_003779 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 3 (B4GALT3), mRNA |
| NM_001296 | Homo sapiens chemokine binding protein 2 (CCBP2), mRNA   |
| NM_001497 | Homo sapiens UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1 (B4GALT1), mRNA |
| NM_014451 | Homo sapiens PTH-responsive osteosarcoma B1 protein (B1), mRNA                                 |
| NM_031265 | Homo sapiens mucin and cadherin-like (MUCDHL), transcript variant 4, mRNA                      |
| NM_031264 | Homo sapiens mucin and cadherin-like (MUCDHL), transcript variant 3, mRNA                      |
| NM_017717 | Homo sapiens mucin and cadherin-like (MUCDHL), transcript variant 2, mRNA                      |
| NM_021924 | Homo sapiens mucin and cadherin-like (MUCDHL), transcript variant 1, mRNA                      |
| NM_019855 | Homo sapiens calcium binding protein 5 (CABP5), mRNA   |
| NM_016367 | Homo sapiens calcium binding protein 3 (CABP3), mRNA   |
| NM_031204 | Homo sapiens calcium binding protein 2 (CABP2), transcript variant 2, mRNA                     |
| NM_005201 | Homo sapiens chemokine (C-C motif) receptor 8 (CCR8), mRNA                                     |
| NM_000786 | Homo sapiens cytochrome P450, 51 (lanosterol 14-alpha-demethylase) (CYP51), mRNA               |
| NM_030908 | Homo sapiens olfactory receptor, family 2, subfamily A, member 4 (OR2A4), mRNA                 |
| NM_001009 | Homo sapiens ribosomal protein S5 (RPS5), mRNA   |
| NM_001032 | Homo sapiens ribosomal protein S29 (RPS29), mRNA   |
| NM_001014 | Homo sapiens ribosomal protein S10 (RPS10), mRNA   |

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| NM_000991 | Homo sapiens ribosomal protein L28 (RPL28), mRNA  |
| NM_000782 | Homo sapiens cytochrome P450, subfamily XXIV (vitamin D 24-hydroxylase) (CYP24), mitochondrial protein encoded by nuclear gene, mRNA                    |
| NM_031226 | Homo sapiens cytochrome P450, subfamily XIX (aromatization of androgens) (CYP19), transcript variant 2, mRNA  |
| NM_000103 | Homo sapiens cytochrome P450, subfamily XIX (aromatization of androgens) (CYP19), transcript variant 1, mRNA  |
| NM_000498 | Homo sapiens cytochrome P450, subfamily XIB (steroid 11-beta-hydroxylase), polypeptide 2 (CYP11B2), mitochondrial protein encoded by nuclear gene, mRNA |
| NM_000102 | Homo sapiens cytochrome P450, subfamily XVII (steroid 17-alpha-hydroxylase), adrenal hyperplasia (CYP17), mRNA  |
| NM_000497 | Homo sapiens cytochrome P450, subfamily XIB (steroid 11-beta-hydroxylase), polypeptide 1 (CYP11B1), mitochondrial protein encoded by nuclear gene, mRNA |
| NM_017460 | Homo sapiens cytochrome P450, subfamily IIIA (naphedipine oxidase), polypeptide 4 (CYP3A4), mRNA  |
| NM_018482 | Homo sapiens development and differentiation enhancing factor 1 (DDEF1), mRNA   |
| NM_016366 | Homo sapiens calcium binding protein 2 (CABP2), transcript variant 1, mRNA  |
| NM_007255 | Homo sapiens xylosylprotein beta1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase I) (B4GALT7), mRNA                                      |
| NM_006668 | Homo sapiens cytochrome P450, subfamily 46 (cholesterol 24-hydroxylase) (CYP46), mRNA   |
| NM_000781 | Homo sapiens cytochrome P450, subfamily XIA (cholesterol side chain cleavage) (CYP11A), nuclear gene encoding mitochondrial protein, mRNA               |
| NM_000579 | Homo sapiens chemokine (C-C motif) receptor 5 (CCR5), mRNA  |
| NM_001295 | Homo sapiens chemokine (C-C motif) receptor 1 (CCR1), mRNA  |
| NM_031492 | Homo sapiens hypothetical protein similar to RNA-binding protein lark (MGC10871), mRNA  |
| NM_031488 | Homo sapiens hypothetical protein DKFZp761I141 (DKFZP761I141), mRNA   |
| NM_031469 | Homo sapiens SH3 domain binding glutamic acid-rich protein like 2 (SH3BGRL2), mRNA  |
| NM_031468 | Homo sapiens calneuron 1 (CALN1), mRNA  |
| NM_031462 | Homo sapiens hypothetical protein DKFZp761H2024 (DKFZP761H2024), mRNA   |
| NM_031458 | Homo sapiens B aggressive lymphoma gene (BAL), mRNA   |
| NM_031445 | Homo sapiens hypothetical protein MGC4268 (MGC4268), mRNA   |
| NM_031440 | Homo sapiens transmembrane protein 7 (TMEM7), mRNA  |
| NM_031429 | Homo sapiens retbindin (RTBDN), mRNA  |
| NM_031427 | Homo sapiens hypothetical protein MGC12435 (MGC12435), mRNA   |
| NM_031426 | Homo sapiens hypothetical protein FLJ12783 (FLJ12783), mRNA   |
| NM_031422 | Homo sapiens GalNAc-4-sulfotransferase 2 (GALNAC4ST-2), mRNA  |
| NM_031415 | Homo sapiens melanoma-derived leucine zipper, extra-nuclear factor (MLZE), mRNA   |
| NM_031413 | Homo sapiens cat eye syndrome chromosome region, candidate 2 (CECR2), mRNA  |
| NM_022719 | Homo sapiens DiGeorge syndrome critical region gene DGS1; likely ortholog of mouse expressed sequence 2 embryonic lethal (DGS1), mRNA                   |
| NM_000669 | Homo sapiens alcohol dehydrogenase 1C (class I), gamma polypeptide (ADH1C), mRNA  |
| NM_000667 | Homo sapiens alcohol dehydrogenase 1A (class I), alpha polypeptide (ADH1A),   |

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|           | mRNA  |
| NM_018833 | Homo sapiens transporter 2, ATP-binding cassette, sub-family B (MDR/TAP) (TAP2), transcript variant 2, mRNA   |
| NM_000544 | Homo sapiens transporter 2, ATP-binding cassette, sub-family B (MDR/TAP) (TAP2), transcript variant 1, mRNA   |
| NM_000593 | Homo sapiens transporter 1, ATP-binding cassette, sub-family B (MDR/TAP) (TAP1), mRNA   |
| NM_004678 | Homo sapiens variable charge, Y chromosome, 2 (VCY2), mRNA  |
| NM_012392 | Homo sapiens PEF protein with a long N-terminal hydrophobic domain (peflin) (PEF), mRNA   |
| NM_031308 | Homo sapiens epiplakin 1 (EPPK1), mRNA  |
| NM_031299 | Homo sapiens hypothetical protein MGC2577 (MGC2577), mRNA   |
| NM_012480 | Homo sapiens zinc finger protein 73 (Cos12) (ZNF73), mRNA   |
| NM_030881 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD) (DDX17), transcript variant 2, mRNA   |
| NM_006386 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 17 (72kD) (DDX17), transcript variant 1, mRNA   |
| NM_003587 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 16 (DDX16), mRNA  |
| NM_000478 | Homo sapiens alkaline phosphatase, liver/bone/kidney (ALPL), mRNA   |
| NM_004820 | Homo sapiens cytochrome P450, subfamily VIIB (oxysterol 7 alpha-hydroxylase), polypeptide 1 (CYP7B1), mRNA  |
| NM_000780 | Homo sapiens cytochrome P450, subfamily VIIA (cholesterol 7 alpha-monooxygenase), polypeptide 1 (CYP7A1), nuclear gene encoding mitochondrial protein, mRNA       |
| NM_016166 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box binding protein 1 (DDXBP1), mRNA  |
| NM_016373 | Homo sapiens WW domain-containing oxidoreductase (WWOX), mRNA   |
| NM_024164 | Homo sapiens tryptase beta 2 (TPSB2), mRNA  |
| NM_003294 | Homo sapiens tryptase beta 1 (TPSB1), mRNA  |
| NM_031310 | Homo sapiens fenestrated-endothelial linked structure protein; PV-1 protein (PV1), mRNA   |
| NM_031302 | Homo sapiens glycosyltransferase (LOC83468), mRNA   |
| NM_031300 | Homo sapiens hypothetical protein MGC2383 (MGC2383), mRNA   |
| NM_031297 | Homo sapiens hypothetical protein DKFZp761H1710 (DKFZP761H1710), mRNA   |
| NM_031287 | Homo sapiens hypothetical protein MGC3133 (MGC3133), mRNA   |
| NM_031286 | Homo sapiens SH3BGRL3-like protein (SH3BGRL3), mRNA   |
| NM_031285 | Homo sapiens hypothetical protein PP1057 (PP1057), mRNA   |
| NM_031279 | Homo sapiens alanine-glyoxylate aminotransferase 2-like 1 (AGXT2L1), mRNA   |
| NM_030970 | Homo sapiens hypothetical protein MGC3771 (MGC3771), mRNA   |
| NM_014357 | Homo sapiens skin-specific protein (XP5), mRNA  |
| NM_030590 | Homo sapiens matrilin 4 (MATN4), transcript variant 2, mRNA   |
| NM_031246 | Homo sapiens pregnancy specific beta-1-glycoprotein 2 (PSG2), mRNA  |
| NM_017422 | Homo sapiens calmodulin-like skin protein (CLSP), mRNA  |
| NM_005956 | Homo sapiens methylenetetrahydrofolate dehydrogenase (NADP+ dependent), methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase (MTHFD1), mRNA |
| NM_005906 | Homo sapiens male germ cell-associated kinase (MAK), mRNA   |
| NM_006389 | Homo sapiens oxygen regulated protein (150kD) (ORP150), mRNA  |
| NM_004803 | Homo sapiens organic cationic transporter-like 4 (ORCTL4), mRNA   |
| NM_030984 | Homo sapiens thromboxane A synthase 1 (platelet, cytochrome P450, subfamily   |



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|           | V) (TBXAS1), transcript variant TXS-II, mRNA   |
| NM_001061 | Homo sapiens thromboxane A synthase 1 (platelet, cytochrome P450, subfamily V) (TBXAS1), transcript variant TXS-I, mRNA                      |
| NM_000773 | Homo sapiens cytochrome P450, subfamily IIE (ethanol-inducible) (CYP2E), mRNA  |
| NM_030592 | Homo sapiens matrilin 4 (MATN4), transcript variant 3, mRNA  |
| NM_003833 | Homo sapiens matrilin 4 (MATN4), transcript variant 1, mRNA  |
| NM_005355 | Homo sapiens kinesin-like 3 (KNSL3), transcript variant 2, mRNA  |
| NM_030615 | Homo sapiens kinesin-like 3 (KNSL3), transcript variant 1, mRNA  |
| NM_004523 | Homo sapiens kinesin-like 1 (KNSL1), mRNA  |
| NM_005000 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5 (13kD, B13) (NDUFA5), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_004541 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1 (7.5kD, MWFE) (NDUFA1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_000771 | Homo sapiens cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 9 (CYP2C9), mRNA  |
| NM_000772 | Homo sapiens cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 18 (CYP2C18), mRNA                                      |
| NM_017778 | Homo sapiens Wolf-Hirschhorn syndrome candidate 1-like 1 (WHSC1L1), transcript variant short, mRNA   |
| NM_023034 | Homo sapiens Wolf-Hirschhorn syndrome candidate 1-like 1 (WHSC1L1), transcript variant long, mRNA  |
| NM_000766 | Homo sapiens cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 13 (CYP2A13), mRNA  |
| NM_006646 | Homo sapiens WAS protein family, member 3 (WASF3), mRNA  |
| NM_018560 | Homo sapiens WW domain-containing oxidoreductase (WWOX), mRNA  |
| NM_014110 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 8 (PPP1R8), mRNA  |
| NM_004109 | Homo sapiens ferredoxin 1 (FDX1), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_030671 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 5, mRNA  |
| NM_030670 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 6, mRNA  |
| NM_030669 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 3, mRNA  |
| NM_030668 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 4, mRNA  |
| NM_030667 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 1, mRNA  |
| NM_002848 | Homo sapiens protein tyrosine phosphatase, receptor type, O (PTPRO), transcript variant 2, mRNA  |
| NM_021979 | Homo sapiens heat shock 70kD protein 2 (HSPA2), mRNA   |
| NM_024005 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3 (DDX3), transcript variant 1, mRNA   |
| NM_001356 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3 (DDX3), transcript variant 2, mRNA   |
| NM_020216 | Homo sapiens arginyl aminopeptidase (aminopeptidase B) (RNPEP), mRNA   |
| NM_006990 | Homo sapiens WAS protein family, member 2 (WASF2), mRNA  |
| NM_012467 | Homo sapiens tryptase gamma 1 (TPSG1), mRNA  |
| NM_007317 | Homo sapiens kinesin-like 4 (KNSL4), mRNA  |

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| NM_004256 | Homo sapiens organic cationic transporter-like 3 (ORCTL3), mRNA   |
| NM_000774 | Homo sapiens cytochrome P450, subfamily IIF, polypeptide 1 (CYP2F1), mRNA   |
| NM_000769 | Homo sapiens cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 19 (CYP2C19), mRNA   |
| NM_031220 | Homo sapiens PYK2 N-terminal domain-interacting receptor 1 (NIR1), mRNA   |
| NM_031212 | Homo sapiens hypothetical protein NPD016 (NPD016), mRNA   |
| NM_031211 | Homo sapiens LAT1-3TM protein (LAT1-3TM), mRNA  |
| NM_031209 | Homo sapiens tRNA-guanine transglycosylase (TGT), mRNA  |
| NM_031206 | Homo sapiens hypothetical protein FLJ12525 (FLJ12525), mRNA   |
| NM_006904 | Homo sapiens protein kinase, DNA-activated, catalytic polypeptide (PRKDC), mRNA   |
| NM_030963 | Homo sapiens hypothetical protein DKFZp434O1427 (DKFZP434O1427), mRNA   |
| NM_030931 | Homo sapiens epididymal secretory protein ESP13.2 (ESP13.2), mRNA   |
| NM_030905 | Homo sapiens olfactory receptor, family 2, subfamily J, member 2 (OR2J2), mRNA  |
| NM_030903 | Homo sapiens olfactory receptor, family 2, subfamily W, member 1 (OR2W1), mRNA  |
| NM_012377 | Homo sapiens olfactory receptor, family 7, subfamily C, member 2 (OR7C2), mRNA  |
| NM_030981 | Homo sapiens small GTP-binding protein (RAB1B), mRNA  |
| NM_030974 | Homo sapiens hypothetical protein DKFZp434N1923 (DKFZP434N1923), mRNA   |
| NM_030973 | Homo sapiens hypothetical protein TCBAP0758 (TCBAP0758), mRNA   |
| NM_030968 | Homo sapiens G protein coupled receptor interacting protein, complement-clq tumor necrosis factor-related (ZSIG37), mRNA  |
| NM_030945 | Homo sapiens complement-clq tumor necrosis factor-related protein; likely ortholog of mouse CORS26 (collagenous repeat-containing sequence of 26-kDa protein) (CTRP3), mRNA |
| NM_030936 | Homo sapiens hypothetical protein DKFZp434C135 (DKFZP434C135), mRNA   |
| NM_030935 | Homo sapiens TSC-22-like (THG-1), mRNA  |
| NM_030926 | Homo sapiens integral membrane protein 3 (ITM3), mRNA   |
| NM_030893 | Homo sapiens CD1E antigen, e polypeptide (CD1E), mRNA   |
| NM_014067 | Homo sapiens LRP16 protein (LRP16), mRNA  |
| NM_030661 | Homo sapiens homeo box A3 (HOXA3), mRNA   |
| NM_030879 | Homo sapiens Small evolutionarily conserved RNA, resembling C/D box small nucleolar (X102), mRNA  |
| NM_012373 | Homo sapiens olfactory receptor, family 3, subfamily A, member 3 (OR3A3), mRNA  |
| NM_015072 | Homo sapiens KIAA0998 protein (KIAA0998), mRNA  |
| NM_030882 | Homo sapiens apolipoprotein L, 2 (APOL2), mRNA  |
| NM_002623 | Homo sapiens prefoldin 4 (PFDN4), mRNA  |
| NM_022167 | Homo sapiens xylosyltransferase II (XT2), mRNA  |
| NM_017506 | Homo sapiens olfactory receptor, family 7, subfamily C, member 1 (OR7C1), mRNA  |
| NM_003372 | Homo sapiens von Hippel-Lindau binding protein 1 (VBP1), mRNA   |
| NM_016097 | Homo sapiens HSPC039 protein (HSPC039), mRNA  |
| NM_014646 | Homo sapiens lipin 2 (LPIN2), mRNA  |
| NM_005880 | Homo sapiens DnaJ (Hsp40) homolog, subfamily A, member 2 (DNAJA2), mRNA   |
| NM_006755 | Homo sapiens transaldolase 1 (TALDO1), mRNA   |

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| NM_005137 | Homo sapiens DiGeorge syndrome critical region gene 2 (DGCR2), mRNA  |
| NM_000022 | Homo sapiens adenosine deaminase (ADA), mRNA   |
| NM_003215 | Homo sapiens tec protein tyrosine kinase (TEC), mRNA   |
| NM_018425 | Homo sapiens phosphatidylinositol 4-kinase type II (PI4KII), mRNA  |
| NM_025238 | Homo sapiens BTB (POZ) domain containing 1 (BTBD1), mRNA   |
| NM_004248 | Homo sapiens G protein-coupled receptor 10 (GPR10), mRNA   |
| NM_001642 | Homo sapiens amyloid beta (A4) precursor-like protein 2 (APLP2), mRNA                                      |
| NM_030821 | Homo sapiens group XII secreted phospholipase A2 (PLA2G12), mRNA   |
| NM_030820 | Homo sapiens hypothetical protein DKFZp564B052 (DKFZp564B052), mRNA  |
| NM_030816 | Homo sapiens hypothetical protein DKFZp566D1346 (DKFZp566D1346), mRNA                                      |
| NM_030807 | Homo sapiens glucose transporter protein 10 (GLUT10), mRNA   |
| NM_030798 | Homo sapiens hypothetical protein DKFZp434D0421 (DKFZp434D0421), mRNA                                      |
| NM_030797 | Homo sapiens hypothetical protein DKFZp566A1524 (DKFZp566A1524), mRNA                                      |
| NM_030788 | Homo sapiens DC-specific transmembrane protein (LOC81501), mRNA  |
| NM_030787 | Homo sapiens factor H-related protein 5 (FHR5), mRNA   |
| NM_030786 | Homo sapiens intermediate filament protein syncoilin (SYNCOILIN), mRNA                                     |
| NM_030785 | Homo sapiens ortholog of mouse radial spokehead-like 1 (RSHL1), mRNA                                       |
| NM_030784 | Homo sapiens brain expressed G-protein-coupled receptor PSP24 beta (PSP24B), mRNA                          |
| NM_030783 | Homo sapiens phosphatidylserine synthase 2 (PTDSS2), mRNA  |
| NM_030779 | Homo sapiens Eag-related gene member 2 (ERG2), mRNA  |
| NM_030774 | Homo sapiens prostate specific G-protein coupled receptor (PSGR), mRNA                                     |
| NM_030772 | Homo sapiens connexin 59 (GJA10), mRNA   |
| NM_030764 | Homo sapiens SH2 domain-containing phosphatase anchor protein 1 (SPAP1), mRNA                              |
| NM_030763 | Homo sapiens nucleosomal binding protein 1 (NSBP1), mRNA   |
| NM_030757 | Homo sapiens makorin, ring finger protein, 4 (MKRN4), mRNA   |
| NM_021813 | Homo sapiens BTB and CNC homology 1, basic leucine zipper transcription factor 2 (BACH2), mRNA             |
| NM_020819 | Homo sapiens KIAA1411 protein (KIAA1411), mRNA   |
| NM_030751 | Homo sapiens transcription factor 8 (represses interleukin 2 expression) (TCF8), mRNA                      |
| NM_030754 | Homo sapiens serum amyloid A2 (SAA2), mRNA   |
| NM_030752 | Homo sapiens t-complex 1 (TCPI), mRNA  |
| NM_030756 | Homo sapiens transcription factor 7-like 2 (T-cell specific, HMG-box) (TCF7L2), mRNA                       |
| NM_006010 | Homo sapiens arginine-rich, mutated in early stage tumors (ARMET), mRNA                                    |
| NM_001182 | Homo sapiens aldehyde dehydrogenase 7 family, member A1 (ALDH7A1), mRNA                                    |
| NM_000382 | Homo sapiens aldehyde dehydrogenase 3 family, member A2 (ALDH3A2), mRNA                                    |
| NM_003486 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 5 (SLC7A5), mRNA |
| NM_000694 | Homo sapiens aldehyde dehydrogenase 3 family, member B1 (ALDH3B1), mRNA                                    |
| NM_000693 | Homo sapiens aldehyde dehydrogenase 1 family, member A3 (ALDH1A3), mRNA                                    |
| NM_030381 | Homo sapiens GLI-Kruppel family member GLI2 (GLI2), transcript variant 3, mRNA                             |

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| NM_030380 | Homo sapiens GLI-Kruppel family member GLI2 (GLI2), transcript variant 2, mRNA  |
| NM_030379 | Homo sapiens GLI-Kruppel family member GLI2 (GLI2), transcript variant 1, mRNA  |
| NM_020166 | Homo sapiens methylcrotonoyl-Coenzyme A carboxylase 1 (alpha) (MCCC1), mRNA   |
| NM_005270 | Homo sapiens GLI-Kruppel family member GLI2 (GLI2), transcript variant 4, mRNA  |
| NM_002381 | Homo sapiens matrilin 3 (MATN3) precursor, mRNA   |
| NM_030583 | Homo sapiens matrilin 2 (MATN2) precursor, transcript variant 2, mRNA   |
| NM_002380 | Homo sapiens matrilin 2 (MATN2) precursor, transcript variant 1, mRNA   |
| NM_002379 | Homo sapiens matrilin 1, cartilage matrix protein (MATN1), mRNA   |
| NM_000168 | Homo sapiens GLI-Kruppel family member GLI3 (Greig cephalopolysyndactyly syndrome) (GLI3), mRNA   |
| NM_003462 | Homo sapiens dynein, axonemal, light intermediate polypeptide (P28), mRNA   |
| NM_017493 | Homo sapiens Hin-1 (HSHIN1), mRNA   |
| NM_005602 | Homo sapiens claudin 11 (oligodendrocyte transmembrane protein) (CLDN11), mRNA  |
| NM_001195 | Homo sapiens beaded filament structural protein 1, filensin (BFSP1), mRNA   |
| NM_004987 | Homo sapiens LIM and senescent cell antigen-like domains 1 (LIMS1), mRNA  |
| NM_000412 | Homo sapiens histidine-rich glycoprotein (HRG), mRNA  |
| NM_024494 | Homo sapiens wingless-type MMTV integration site family, member 2B (WNT2B), transcript variant WNT-2B2, mRNA  |
| NM_004993 | Homo sapiens Machado-Joseph disease (spinocerebellar ataxia 3, olivopontocerebellar ataxia 3, autosomal dominant, ataxin 3) (MJD), transcript variant 1, mRNA |
| NM_004185 | Homo sapiens wingless-type MMTV integration site family, member 2B (WNT2B), transcript variant WNT-2B1, mRNA  |
| NM_024415 | Homo sapiens VASA protein (VASA), transcript variant 2, mRNA  |
| NM_004398 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA   |
| NM_004397 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6), mRNA   |
| NM_004396 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 5 (RNA helicase, 68kD) (DDX5), mRNA   |
| NM_030588 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 9 (RNA helicase A, nuclear DNA helicase II; leukophysin) (DDX9), transcript variant 2, mRNA         |
| NM_001357 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 9 (RNA helicase A, nuclear DNA helicase II; leukophysin) (DDX9), transcript variant 1, mRNA         |
| NM_004660 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide, Y chromosome (DBY), mRNA   |
| NM_019039 | Homo sapiens VASA protein (VASA), transcript variant 1, mRNA  |
| NM_012382 | Homo sapiens osmosis responsive factor (OSRF), mRNA   |
| NM_000387 | Homo sapiens solute carrier family 25 (carnitine/acylcarnitine translocase), member 20 (SLC25A20), mitochondrial protein encoded by nuclear gene, mRNA        |
| NM_007240 | Homo sapiens dual specificity phosphatase 12 (DUSP12), mRNA   |
| NM_004940 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 7 (RNA helicase, 52kD) (DDX7), mRNA   |
| NM_004939 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1),   |

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|           | mRNA   |
| NM_013366 | Homo sapiens anaphase-promoting complex subunit 2 (APC2), mRNA   |
| NM_003791 | Homo sapiens membrane-bound transcription factor protease, site 1 (MBTPS1), mRNA                               |
| NM_002251 | Homo sapiens potassium voltage-gated channel, delayed-rectifier, subfamily S, member 1 (KCNS1), mRNA           |
| NM_006903 | Homo sapiens inorganic pyrophosphatase (SID6-306), mRNA  |
| NM_020956 | Homo sapiens periaxin (KIAA1620), mRNA   |
| NM_015435 | Homo sapiens double ring-finger protein, Dorfin (DORFIN), mRNA   |
| NM_014338 | Homo sapiens phosphatidylserine decarboxylase (PISD), mRNA   |
| NM_021954 | Homo sapiens gap junction protein, alpha 3, 46kD (connexin 46) (GJA3), mRNA                                    |
| NM_023068 | Homo sapiens sialoadhesin (SN), mRNA   |
| NM_022821 | Homo sapiens elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 1 (ELOVL1), mRNA     |
| NM_021126 | Homo sapiens mercaptopyruvate sulfurtransferase (MPST), mRNA   |
| NM_030666 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 1 (SERPINB1), mRNA         |
| NM_024014 | Homo sapiens homeo box A6 (HOXA6), mRNA  |
| NM_030665 | Homo sapiens retinoic acid induced 1 (RAI1), mRNA  |
| NM_030663 | Homo sapiens mitochondrial capsule selenoprotein (MCSP), mRNA  |
| NM_030664 | Homo sapiens phosphotriesterase related (PTER), mRNA   |
| NM_030662 | Homo sapiens mitogen-activated protein kinase kinase 2 (MAP2K2), mRNA  |
| NM_024896 | Homo sapiens hypothetical protein FLJ23309 (FLJ23309), mRNA  |
| NM_002183 | Homo sapiens interleukin 3 receptor, alpha (low affinity) (IL3RA), mRNA  |
| NM_021244 | Homo sapiens Rag D protein; hypothetical GTP-binding protein DKFZp761H171 (RAGD), mRNA                         |
| NM_005088 | Homo sapiens DNA segment on chromosome X and Y (unique) 155 expressed sequence (DXYS155E), mRNA                |
| NM_016090 | Homo sapiens RNA binding motif protein 7 (RBM7), mRNA  |
| NM_013306 | Homo sapiens sorting nexin 15 (SNX15), mRNA  |
| NM_018362 | Homo sapiens likely ortholog of mouse LIN-7C; mammalian LIN-7 protein 3 (LIN-7-C), mRNA                        |
| NM_018300 | Homo sapiens zinc finger protein 83 (HPF1) (ZNF83), mRNA   |
| NM_014754 | Homo sapiens phosphatidylserine synthase 1 (PTDSS1), mRNA  |
| NM_006140 | Homo sapiens colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage) (CSF2RA), mRNA |
| NM_004043 | Homo sapiens acetylserotonin O-methyltransferase (ASMT), mRNA  |
| NM_002414 | Homo sapiens antigen identified by monoclonal antibodies 12E7, F21 and O13 (MIC2), mRNA                        |
| NM_002186 | Homo sapiens interleukin 9 receptor (IL9R), mRNA   |
| NM_030657 | Homo sapiens lens intrinsic membrane protein 2 (19kD) (LIM2), mRNA   |
| NM_014349 | Homo sapiens apolipoprotein L, 3 (APOL3), mRNA   |
| NM_022566 | Homo sapiens mesoderm development candidate 1 (MESDC1), mRNA   |
| NM_020727 | Homo sapiens zinc finger protein 295 (ZNF295), mRNA  |
| NM_012074 | Homo sapiens cer-d4 (mouse) homolog (CERD4), mRNA  |
| NM_000861 | Homo sapiens histamine receptor H1 (HRH1), mRNA  |
| NM_006273 | Homo sapiens small inducible cytokine A7 (monocyte chemotactic protein 3) (SCYA7), mRNA                        |
| NM_002395 | Homo sapiens malic enzyme 1, NADP(+)-dependent, cytosolic (ME1), mRNA  |
| NM_024165 | Homo sapiens PHD finger protein 1 (PHF1), transcript variant 2, mRNA   |
| NM_002636 | Homo sapiens PHD finger protein 1 (PHF1), transcript variant 1, mRNA   |
| NM_001082 | Homo sapiens cytochrome P450, subfamily IVF, polypeptide 2 (CYP4F2),   |

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|           | mRNA   |
| NM_007253 | Homo sapiens cytochrome P450, subfamily IVF, polypeptide 8 (CYP4F8), mRNA  |
| NM_000779 | Homo sapiens cytochrome P450, subfamily IVB, polypeptide 1 (CYP4B1), mRNA  |
| NM_001514 | Homo sapiens general transcription factor IIB (GTF2B), mRNA  |
| NM_004127 | Homo sapiens G protein pathway suppressor 1 (GPS1), mRNA   |
| NM_024423 | Homo sapiens desmocollin 3 (DSC3), transcript variant Dsc3b, mRNA  |
| NM_001941 | Homo sapiens desmocollin 3 (DSC3), transcript variant Dsc3a, mRNA  |
| NM_004949 | Homo sapiens desmocollin 2 (DSC2), transcript variant Dsc2b, mRNA  |
| NM_024422 | Homo sapiens desmocollin 2 (DSC2), transcript variant Dsc2a, mRNA  |
| NM_004948 | Homo sapiens desmocollin 1 (DSC1), transcript variant Dsc1b, mRNA  |
| NM_024421 | Homo sapiens desmocollin 1 (DSC1), transcript variant Dsc1a, mRNA  |
| NM_001923 | Homo sapiens damage-specific DNA binding protein 1 (127kD) (DDB1), mRNA  |
| NM_000425 | Homo sapiens L1 cell adhesion molecule (hydrocephalus, stenosis of aqueduct of Sylvius 1, MASA (mental retardation, aphasia, shuffling gait and adducted thumbs) syndrome, spastic paraplegia 1) (L1CAM), transcript variant 1, mRNA |
| NM_024003 | Homo sapiens L1 cell adhesion molecule (hydrocephalus, stenosis of aqueduct of Sylvius 1, MASA (mental retardation, aphasia, shuffling gait and adducted thumbs) syndrome, spastic paraplegia 1) (L1CAM), transcript variant 2, mRNA |
| NM_004110 | Homo sapiens ferredoxin reductase (FDXR), transcript variant 2, nuclear gene encoding mitochondrial protein, mRNA  |
| NM_024417 | Homo sapiens ferredoxin reductase (FDXR), transcript variant 1, nuclear gene encoding mitochondrial protein, mRNA  |
| NM_023944 | Homo sapiens cytochrome P450 isoform 4F12 (CYP4F12), mRNA  |
| NM_022845 | Homo sapiens core-binding factor, beta subunit (CBFB), transcript variant 1, mRNA  |
| NM_022041 | Homo sapiens giant axonal neuropathy (gigaxonin) (GAN), mRNA   |
| NM_021187 | Homo sapiens cytochrome P450, subfamily IVF, polypeptide 11 (CYP4F11), mRNA  |
| NM_019599 | Homo sapiens taste receptor, type 2, member 1 (TAS2R1), mRNA   |
| NM_017579 | Homo sapiens deleted in malignant brain tumors 1 (DMBT1), transcript variant 3, mRNA   |
| NM_015670 | Homo sapiens sentrin/SUMO-specific protease 3 (SEN3), mRNA   |
| NM_012096 | Homo sapiens adaptor protein containing pH domain, PTB domain and leucine zipper motif (APPL), mRNA  |
| NM_005392 | Homo sapiens PHD finger protein 2 (PHF2), mRNA   |
| NM_000896 | Homo sapiens cytochrome P450, subfamily IVF, polypeptide 3 (leukotriene B4 omega hydroxylase) (CYP4F3), mRNA   |
| NM_022661 | Homo sapiens SPANX family, member C (SPANXC), mRNA   |
| NM_022573 | Homo sapiens TSPYq1 (TSPYQ1), mRNA   |
| NM_022089 | Homo sapiens putative ATPase (HSA9947), mRNA   |
| NM_025228 | Homo sapiens hypothetical protein dJ434O14.3 (DJ434O14.3), mRNA  |
| NM_025013 | Homo sapiens KIAA1031 protein (KIAA1031), mRNA   |
| NM_025027 | Homo sapiens hypothetical protein FLJ14260 (FLJ14260), mRNA  |
| NM_022102 | Homo sapiens hypothetical protein FLJ20958 (FLJ20958), mRNA  |
| NM_021724 | Homo sapiens nuclear receptor subfamily 1, group D, member 1 (NR1D1), mRNA   |
| NM_030570 | Homo sapiens hypothetical protein MGC10902 (MGC10902), mRNA  |
| NM_025135 | Homo sapiens hypothetical protein FLJ22297 (KIAA1695), mRNA  |
| NM_024317 | Homo sapiens immunoglobulin-like transcript 10 (ILT10), mRNA   |
| NM_021822 | Homo sapiens phorbolin-like protein MDS019 (MDS019), mRNA  |

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| NM_017509 | Homo sapiens ACO for serine protease homologue (HSRNASPH), mRNA   |
| NM_005583 | Homo sapiens lymphoblastic leukemia derived sequence 1 (LYL1), mRNA   |
| NM_020070 | Homo sapiens immunoglobulin lambda-like polypeptide 1 (IGLL1), mRNA   |
| NM_002383 | Homo sapiens MYC-associated zinc finger protein (purine-binding transcription factor) (MAZ), mRNA                     |
| NM_016944 | Homo sapiens taste receptor, type 2, member 4 (TAS2R4), mRNA  |
| NM_016943 | Homo sapiens taste receptor, type 2, member 3 (TAS2R3), mRNA  |
| NM_000378 | Homo sapiens Wilms tumor 1 (WT1), transcript variant A, mRNA  |
| NM_024426 | Homo sapiens Wilms tumor 1 (WT1), transcript variant D, mRNA  |
| NM_024425 | Homo sapiens Wilms tumor 1 (WT1), transcript variant C, mRNA  |
| NM_024424 | Homo sapiens Wilms tumor 1 (WT1), transcript variant B, mRNA  |
| NM_000765 | Homo sapiens cytochrome P450, subfamily IIIA, polypeptide 7 (CYP3A7), mRNA  |
| NM_021570 | Homo sapiens BarH-like homeobox 1 (BARX1), mRNA   |
| NM_000068 | Homo sapiens calcium channel, voltage-dependent, P/Q type, alpha 1A subunit (CACNA1A), transcript variant 1, mRNA     |
| NM_030574 | Homo sapiens hypothetical protein MGC10327 (MGC10327), mRNA   |
| NM_030573 | Homo sapiens hypothetical protein MGC10963 (MGC10963), mRNA   |
| NM_024867 | Homo sapiens hypothetical protein FLJ23577 (FLJ23577), mRNA   |
| NM_002739 | Homo sapiens protein kinase C, gamma (PRKCG), mRNA  |
| NM_020548 | Homo sapiens diazepam binding inhibitor (GABA receptor modulator, acyl-Coenzyme A binding protein) (DBI), mRNA        |
| NM_025176 | Homo sapiens KIAA0980 protein (KIAA0980), mRNA  |
| NM_003789 | Homo sapiens TNFRSF1A-associated via death domain (TRADD), mRNA   |
| NM_017541 | Homo sapiens crystallin, gamma S (CRYGS), mRNA  |
| NM_006891 | Homo sapiens crystallin, gamma D (CRYGD), mRNA  |
| NM_020989 | Homo sapiens crystallin, gamma C (CRYGC), mRNA  |
| NM_005210 | Homo sapiens crystallin, gamma B (CRYGB), mRNA  |
| NM_014617 | Homo sapiens crystallin, gamma A (CRYGA), mRNA  |
| NM_002396 | Homo sapiens malic enzyme 2, NAD(+)-dependent, mitochondrial (ME2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_025268 | Homo sapiens hypothetical protein MGC4659 (MGC4659), mRNA   |
| NM_025244 | Homo sapiens testis specific, 10 (TSGA10), mRNA   |
| NM_025240 | Homo sapiens B7 homolog 3 (B7-H3), mRNA   |
| NM_025237 | Homo sapiens sclerostin (SOST), mRNA  |
| NM_025236 | Homo sapiens HZFw1 protein (HZFW1), mRNA  |
| NM_025235 | Homo sapiens tankyrase 2 (TNKL), mRNA   |
| NM_025233 | Homo sapiens nucleotide binding protein (NBP), mRNA   |
| NM_025232 | Homo sapiens hypothetical protein FLJ22246 (FLJ22246), mRNA   |
| NM_025218 | Homo sapiens UL16-binding protein 1 (ULBP1), mRNA   |
| NM_025217 | Homo sapiens UL16-binding protein 2 (ULBP2), mRNA   |
| NM_025215 | Homo sapiens pseudouridine synthase 1 (PUS1), mRNA  |
| NM_025214 | Homo sapiens CTCL tumor antigen se57-1 (SE57-1), mRNA   |
| NM_025212 | Homo sapiens Dvl-binding protein IDAX (inhibition of the Dvl and Axin complex) (IDAX), mRNA                           |
| NM_025210 | Homo sapiens type 1 protein phosphatase inhibitor (I-4), mRNA   |
| NM_025209 | Homo sapiens enhancer of polycomb 1 (EPC1), mRNA  |
| NM_025205 | Homo sapiens hypothetical protein DKFZp434N185 (DKFZP434N185), mRNA   |
| NM_025198 | Homo sapiens transcription termination factor-like protein (LOC80298), mRNA   |
| NM_025193 | Homo sapiens 3 beta-hydroxy-delta 5-C27-steroid oxidoreductase (C(27)-3BETA-HSD), mRNA                                |
| NM_025180 | Homo sapiens hypothetical protein FLJ13386 (FLJ13386), mRNA   |

|           |   |
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| NM_025161 | Homo sapiens hypothetical protein FLJ22175 (FLJ22175), mRNA               |
| NM_025158 | Homo sapiens hypothetical protein FLJ22251 (FLJ22251), mRNA               |
| NM_025148 | Homo sapiens hypothetical protein FLJ12986 (FLJ12986), mRNA               |
| NM_025137 | Homo sapiens hypothetical protein FLJ21439 (FLJ21439), mRNA               |
| NM_025116 | Homo sapiens hypothetical protein FLJ12781 (FLJ12781), mRNA               |
| NM_025114 | Homo sapiens hypothetical protein FLJ13615 (FLJ13615), mRNA               |
| NM_025083 | Homo sapiens hypothetical protein FLJ21128 (FLJ21128), mRNA               |
| NM_025054 | Homo sapiens hypothetical protein FLJ23132 (FLJ23132), mRNA               |
| NM_025017 | Homo sapiens hypothetical protein FLJ13892 (FLJ13892), mRNA               |
| NM_025011 | Homo sapiens hypothetical protein FLJ13744 (FLJ13744), mRNA               |
| NM_024995 | Homo sapiens hypothetical protein FLJ12616 (FLJ12616), mRNA               |
| NM_024987 | Homo sapiens hypothetical protein FLJ12345 (FLJ12345), mRNA               |
| NM_024900 | Homo sapiens hypothetical protein FLJ22479 (FLJ22479), mRNA               |
| NM_024874 | Homo sapiens hypothetical protein FLJ14225 (FLJ14225), mRNA               |
| NM_024873 | Homo sapiens hypothetical protein FLJ21162 (FLJ21162), mRNA               |
| NM_024861 | Homo sapiens hypothetical protein FLJ22671 (FLJ22671), mRNA               |
| NM_024836 | Homo sapiens hypothetical protein FLJ22301 (FLJ22301), mRNA               |
| NM_024822 | Homo sapiens hypothetical protein FLJ22601 (FLJ22601), mRNA               |
| NM_024819 | Homo sapiens hypothetical protein FLJ22955 (FLJ22955), mRNA               |
| NM_024816 | Homo sapiens hypothetical protein FLJ23282 (FLJ23282), mRNA               |
| NM_024803 | Homo sapiens hypothetical protein FLJ21665 (FLJ21665), mRNA               |
| NM_024795 | Homo sapiens hypothetical protein FLJ22800 (FLJ22800), mRNA               |
| NM_024767 | Homo sapiens hypothetical protein FLJ21120 (FLJ21120), mRNA               |
| NM_024760 | Homo sapiens hypothetical protein FLJ14009 (FLJ14009), mRNA               |
| NM_024741 | Homo sapiens hypothetical protein FLJ12827 (FLJ12827), mRNA               |
| NM_024723 | Homo sapiens hypothetical protein FLJ23471 (FLJ23471), mRNA               |
| NM_024720 | Homo sapiens hypothetical protein FLJ23510 (FLJ23510), mRNA               |
| NM_024698 | Homo sapiens hypothetical protein FLJ13044 (FLJ13044), mRNA               |
| NM_024692 | Homo sapiens hypothetical protein FLJ21069 (FLJ21069), mRNA               |
| NM_024689 | Homo sapiens hypothetical protein FLJ14103 (FLJ14103), mRNA               |
| NM_024687 | Homo sapiens hypothetical protein FLJ23049 (FLJ23049), mRNA               |
| NM_024648 | Homo sapiens hypothetical protein FLJ22222 (FLJ22222), mRNA               |
| NM_024622 | Homo sapiens hypothetical protein FLJ21901 (FLJ21901), mRNA               |
| NM_024611 | Homo sapiens hypothetical protein FLJ11896 (FLJ11896), mRNA               |
| NM_024591 | Homo sapiens hypothetical protein FLJ11749 (FLJ11749), mRNA               |
| NM_024561 | Homo sapiens hypothetical protein FLJ22054 (FLJ22054), mRNA               |
| NM_024540 | Homo sapiens hypothetical protein FLJ20917 (FLJ20917), mRNA               |
| NM_024518 | Homo sapiens UL16-binding protein 3 (ULBP3), mRNA                         |
| NM_024515 | Homo sapiens hypothetical protein MGC4645 (MGC4645), mRNA                 |
| NM_024504 | Homo sapiens PR domain containing 14 (PRDM14), mRNA                       |
| NM_024501 | Homo sapiens homeo box D1 (HOXD1), mRNA                                   |
| NM_006821 | Homo sapiens peroxisomal long-chain acyl-coA thioesterase (ZAP128), mRNA  |
| NM_006680 | Homo sapiens malic enzyme 3, NADP(+)-dependent, mitochondrial (ME3), mRNA |
| NM_001944 | Homo sapiens desmoglein 3 (pemphigus vulgaris antigen) (DSG3), mRNA       |
| NM_001943 | Homo sapiens desmoglein 2 (DSG2), mRNA                                    |
| NM_001942 | Homo sapiens desmoglein 1 (DSG1), mRNA                                    |
| NM_024500 | Homo sapiens likely ortholog of mouse polydom (POLYDOM), mRNA             |
| NM_024498 | Homo sapiens zinc finger protein 117 (HPF9) (ZNF117), mRNA                |
| NM_018943 | Homo sapiens tubulin, alpha-like 2 (TUBAL2), mRNA                         |
| NM_015640 | Homo sapiens PAI-1 mRNA-binding protein (PAI-RBP1), mRNA                  |



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|-----------|--|
| NM_015332 | Homo sapiens KIAA1068 protein (KIAA1068), mRNA   |
| NM_022001 | Homo sapiens SMAD in the antisense orientation (DAMS), mRNA  |
| NM_021708 | Homo sapiens leukocyte-associated Ig-like receptor 1 (LAIR1), transcript variant d, mRNA                                   |
| NM_021706 | Homo sapiens leukocyte-associated Ig-like receptor 1 (LAIR1), transcript variant b, mRNA                                   |
| NM_002287 | Homo sapiens leukocyte-associated Ig-like receptor 1 (LAIR1), transcript variant a, mRNA                                   |
| NM_004424 | Homo sapiens E4F transcription factor 1 (E4F1), mRNA   |
| NM_018834 | Homo sapiens matrin 3 (MATR3), mRNA  |
| NM_017830 | Homo sapiens ovarian carcinoma immunoreactive antigen (OCIA), mRNA   |
| NM_006926 | Homo sapiens surfactant, pulmonary-associated protein A2 (SFTPA2), mRNA  |
| NM_005411 | Homo sapiens surfactant, pulmonary-associated protein A1 (SFTPA1), mRNA  |
| NM_024492 | Homo sapiens apolipoprotein (a) related gene C (APOARGC), mRNA   |
| NM_024491 | Homo sapiens p10-binding protein (BITE), mRNA  |
| NM_015472 | Homo sapiens transcriptional co-activator with PDZ-binding motif (TAZ) (TAZ), mRNA   |
| NM_017797 | Homo sapiens BTB (POZ) domain containing 2 (BTBD2), mRNA   |
| NM_002826 | Homo sapiens quiescin Q6 (QSCN6), mRNA   |
| NM_024010 | Homo sapiens 5-methyltetrahydrofolate-homocysteine methyltransferase reductase (MTRR), transcript variant 2, mRNA          |
| NM_004972 | Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA   |
| NM_000761 | Homo sapiens cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 2 (CYP1A2), mRNA                      |
| NM_000104 | Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1), mRNA |
| NM_000499 | Homo sapiens cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 1 (CYP1A1), mRNA                      |
| NM_024318 | Homo sapiens immunoglobulin-like transcript 8 (ILT8), mRNA   |
| NM_021806 | Homo sapiens 2.19 gene (2.19), mRNA  |
| NM_006208 | Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 1 (ENPP1), mRNA  |
| NM_007076 | Homo sapiens Huntingtin interacting protein E (HYPE), mRNA   |
| NM_018571 | Homo sapiens amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 2 (ALS2CR2), mRNA                     |
| NM_015049 | Homo sapiens amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 3 (ALS2CR3), mRNA                     |
| NM_023036 | Homo sapiens dynein intermediate chain 2 (DNAI2), mRNA   |
| NM_022171 | Homo sapiens T-cell leukemia translocation altered gene (TCTA), mRNA   |
| NM_016128 | Homo sapiens coat protein gamma-cop (LOC51137), mRNA   |
| NM_021999 | Homo sapiens integral membrane protein 2B (ITM2B), mRNA  |
| NM_021992 | Homo sapiens thymosin, beta, identified in neuroblastoma cells (TMSNB), mRNA   |
| NM_021994 | Homo sapiens zinc finger protein 277 (ZNF277), mRNA  |
| NM_007257 | Homo sapiens paraneoplastic antigen MA2 (PNMA2), mRNA  |
| NM_021972 | Homo sapiens sphingosine kinase 1 (SPHK1), mRNA  |
| NM_021976 | Homo sapiens retinoid X receptor, beta (RXRB), mRNA  |
| NM_021963 | Homo sapiens nucleosome assembly protein 1-like 2 (NAP1L2), mRNA   |
| NM_021978 | Homo sapiens suppression of tumorigenicity 14 (colon carcinoma, matriptase, epithin) (ST14), mRNA                          |
| NM_021977 | Homo sapiens solute carrier family 22 (extraneuronal monoamine transporter), member 3 (SLC22A3), mRNA                      |

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| NM_021964 | Homo sapiens zinc finger protein 148 (pHZ-52) (ZNF148), mRNA  |
| NM_021966 | Homo sapiens T-cell leukemia/lymphoma 1A (TCL1A), mRNA  |
| NM_012186 | Homo sapiens forkhead box E3 (FOXE3), mRNA  |
| NM_012182 | Homo sapiens forkhead box B1 (FOXB1), mRNA  |
| NM_006893 | Homo sapiens ligatin (LGTN), mRNA   |
| NM_021955 | Homo sapiens guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 1 (GNGT1), mRNA |
| NM_021959 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 11 (PPP1R11), mRNA                               |
| NM_021951 | Homo sapiens doublesex and mab-3 related transcription factor 1 (DMRT1), mRNA                                       |
| NM_021960 | Homo sapiens myeloid cell leukemia sequence 1 (BCL2-related) (MCL1), mRNA   |
| NM_021952 | Homo sapiens ELAV (embryonic lethal, abnormal vision, Drosophila)-like 4 (Hu antigen D) (ELAVL4), mRNA              |
| NM_021949 | Homo sapiens ATPase, Ca++ transporting, plasma membrane 3 (ATP2B3), mRNA  |
| NM_021953 | Homo sapiens forkhead box M1 (FOXM1), mRNA  |
| NM_021956 | Homo sapiens glutamate receptor, ionotropic, kainate 2 (GRIK2), mRNA  |
| NM_004886 | Homo sapiens amyloid beta (A4) precursor protein-binding, family A, member 3 (X11-like 2) (APBA3), mRNA             |
| NM_006557 | Homo sapiens doublesex and mab-3 related transcription factor 2 (DMRT2), mRNA                                       |
| NM_002253 | Homo sapiens kinase insert domain receptor (a type III receptor tyrosine kinase) (KDR), mRNA                        |
| NM_002178 | Homo sapiens insulin-like growth factor binding protein 6 (IGFBP6), mRNA  |
| NM_003850 | Homo sapiens succinate-CoA ligase, ADP-forming, beta subunit (SUCLA2), mRNA   |
| NM_003802 | Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA  |
| NM_006958 | Homo sapiens zinc finger protein 16 (KOX 9) (ZNF16), mRNA   |
| NM_006852 | Homo sapiens tousled-like kinase 2 (TLK2), mRNA   |
| NM_021229 | Homo sapiens netrin 4 (NTN4), mRNA  |
| NM_015718 | Homo sapiens NADPH oxidase 3 (NOX3), mRNA   |
| NM_015003 | Homo sapiens golgin-67 (KIAA0855), mRNA   |
| NM_006178 | Homo sapiens N-ethylmaleimide-sensitive factor (NSF), mRNA  |
| NM_003116 | Homo sapiens sperm associated antigen 4 (SPAG4), mRNA   |
| NM_018724 | Homo sapiens interleukin 20 (IL20), mRNA  |
| NM_019083 | Homo sapiens hypothetical protein (FLJ10287), mRNA  |
| NM_003114 | Homo sapiens sperm associated antigen 1 (SPAG1), mRNA   |
| NM_021097 | Homo sapiens solute carrier family 8 (sodium/calcium exchanger), member 1 (SLC8A1), mRNA                            |
| NM_021102 | Homo sapiens serine protease inhibitor, Kunitz type, 2 (SPINT2), mRNA   |
| NM_021101 | Homo sapiens claudin 1 (CLDN1), mRNA  |
| NM_021095 | Homo sapiens solute carrier family 5 (sodium-dependent vitamin transporter), member 6 (SLC5A6), mRNA                |
| NM_021076 | Homo sapiens neurofilament, heavy polypeptide (200kD) (NEFH), mRNA  |
| NM_001751 | Homo sapiens cysteinyl-tRNA synthetase (CARS), mRNA   |
| NM_021074 | Homo sapiens NADH dehydrogenase (ubiquinone) flavoprotein 2 (24kD) (NDUFV2), mRNA                                   |
| NM_020998 | Homo sapiens macrophage stimulating 1 (hepatocyte growth factor-like) (MST1), mRNA                                  |
| NM_003147 | Homo sapiens synovial sarcoma, X breakpoint 2 (SSX2), mRNA  |

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| NM_015392 | Homo sapiens neural proliferation, differentiation and control, 1 (NPDC1), mRNA   |
| NM_020482 | Homo sapiens activator of CREM in testis (ACT), mRNA  |
| NM_014509 | Homo sapiens kraken-like (BK126B4.1), mRNA  |
| NM_005132 | Homo sapiens Rec8p, a meiotic recombination and sister chromatid cohesion phosphoprotein of the rad21p family (REC8), mRNA  |
| NM_018896 | Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA   |
| NM_005329 | Homo sapiens hyaluronan synthase 3 (HAS3), mRNA   |
| NM_015193 | Homo sapiens activity-regulated cytoskeleton-associated protein (ARC), mRNA   |
| NM_016203 | Homo sapiens protein kinase, AMP-activated, gamma 2 non-catalytic subunit (PRKAG2), mRNA  |
| NM_000627 | Homo sapiens latent transforming growth factor beta binding protein 1 (LTBP1), mRNA   |
| NM_002454 | Homo sapiens 5-methyltetrahydrofolate-homocysteine methyltransferase reductase (MTRR), transcript variant 1, mRNA   |
| NM_001091 | Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), mRNA   |
| NM_024016 | Homo sapiens homeo box B8 (HOXB8), mRNA   |
| NM_024015 | Homo sapiens homeo box B4 (HOXB4), mRNA   |
| NM_015227 | Homo sapiens KIAA0958 protein (KIAA0958), mRNA  |
| NM_024430 | Homo sapiens proline-serine-threonine phosphatase interacting protein 2 (PSTPIP2), mRNA   |
| NM_003588 | Homo sapiens cullin 4B (CUL4B), mRNA  |
| NM_016059 | Homo sapiens peptidylprolyl isomerase (cyclophilin)-like 1 (PPIL1), mRNA  |
| NM_014432 | Homo sapiens interleukin 20 receptor, alpha (IL20RA), mRNA  |
| NM_000270 | Homo sapiens nucleoside phosphorylase (NP), mRNA  |
| NM_003021 | Homo sapiens small glutamine-rich tetratricopeptide repeat (TPR)-containing (SGT), mRNA   |
| NM_002038 | Homo sapiens interferon, alpha-inducible protein (clone IFI-6-16) (G1P3), transcript variant 1, mRNA  |
| NM_022873 | Homo sapiens interferon, alpha-inducible protein (clone IFI-6-16) (G1P3), transcript variant 3, mRNA  |
| NM_022872 | Homo sapiens interferon, alpha-inducible protein (clone IFI-6-16) (G1P3), transcript variant 2, mRNA  |
| NM_022803 | Homo sapiens uncoupling protein 3 (mitochondrial, proton carrier) (UCP3), transcript variant short, nuclear gene encoding mitochondrial protein, mRNA                   |
| NM_003356 | Homo sapiens uncoupling protein 3 (mitochondrial, proton carrier) (UCP3), transcript variant long, nuclear gene encoding mitochondrial protein, mRNA                    |
| NM_022810 | Homo sapiens solute carrier family 25 (mitochondrial carrier, brain), member 14 (SLC25A14), transcript variant short, nuclear gene encoding mitochondrial protein, mRNA |
| NM_003355 | Homo sapiens uncoupling protein 2 (mitochondrial, proton carrier) (UCP2), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_021833 | Homo sapiens uncoupling protein 1 (mitochondrial, proton carrier) (UCP1), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_002231 | Homo sapiens kangai 1 (suppression of tumorigenicity 6, prostate; CD82 antigen (R2 leukocyte antigen, antigen detected by monoclonal and antibody IA4)) (KAI1), mRNA    |
| NM_004967 | Homo sapiens integrin-binding sialoprotein (bone sialoprotein, bone sialoprotein II) (IBSP), mRNA   |
| NM_000490 | Homo sapiens arginine vasopressin (neurophysin II, antidiuretic hormone,  |

|           |  |
|-----------|--|
|           | diabetes insipidus, neurohypophyseal) (AVP), mRNA  |
| NM_022877 | Homo sapiens survival of motor neuron 2, centromeric (SMN2), transcript variant c, mRNA  |
| NM_022876 | Homo sapiens survival of motor neuron 2, centromeric (SMN2), transcript variant b, mRNA  |
| NM_022875 | Homo sapiens survival of motor neuron 2, centromeric (SMN2), transcript variant a, mRNA  |
| NM_017411 | Homo sapiens survival of motor neuron 2, centromeric (SMN2), transcript variant d, mRNA  |
| NM_005474 | Homo sapiens histone deacetylase 5 (HDAC5), mRNA   |
| NM_006037 | Homo sapiens histone deacetylase 4 (HDAC4), mRNA   |
| NM_003474 | Homo sapiens a disintegrin and metalloproteinase domain 12 (meltrin alpha) (ADAM12), transcript variant 1, mRNA  |
| NM_000344 | Homo sapiens survival of motor neuron 1, telomeric (SMN1), transcript variant d, mRNA  |
| NM_022874 | Homo sapiens survival of motor neuron 1, telomeric (SMN1), transcript variant b, mRNA  |
| NM_006400 | Homo sapiens dynactin 2 (p50) (DCTN2), mRNA  |
| NM_021969 | Homo sapiens nuclear receptor subfamily 0, group B, member 2 (NR0B2), mRNA   |
| NM_021967 | Homo sapiens small EDRK-rich factor 1A (telomeric) (SERF1A), mRNA  |
| NM_001515 | Homo sapiens general transcription factor IIH, polypeptide 2 (44kD subunit) (GTF2H2), mRNA   |
| NM_003951 | Homo sapiens solute carrier family 25 (mitochondrial carrier, brain), member 14 (SLC25A14), transcript variant long, nuclear gene encoding mitochondrial protein, mRNA |
| NM_004277 | Homo sapiens uncoupling protein 4 (UCP4), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_004536 | Homo sapiens baculoviral IAP repeat-containing 1 (BIRC1), mRNA   |
| NM_000346 | Homo sapiens SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal) (SOX9), mRNA  |
| NM_003645 | Homo sapiens fatty-acid-Coenzyme A ligase, very long-chain 1 (FACVL1), mRNA  |
| NM_024409 | Homo sapiens natriuretic peptide precursor C (NPPC), mRNA  |
| NM_024410 | Homo sapiens outer dense fibre of sperm tails 1 (ODF1), mRNA   |
| NM_004180 | Homo sapiens TRAF family member-associated NFKB activator (TANK), mRNA   |
| NM_024332 | Homo sapiens c6.1A (C6.1A), mRNA   |
| NM_024324 | Homo sapiens hypothetical protein MGC11256 (MGC11256), mRNA  |
| NM_024315 | Homo sapiens hypothetical protein MGC4175 (MGC4175), mRNA  |
| NM_024311 | Homo sapiens hypothetical protein ET (ET), mRNA  |
| NM_024309 | Homo sapiens hypothetical protein MGC4289 (MGC4289), mRNA  |
| NM_024306 | Homo sapiens fatty acid hydroxylase (FAAH), mRNA   |
| NM_024300 | Homo sapiens hypothetical protein MGC2217 (MGC2217), mRNA  |
| NM_024296 | Homo sapiens hypothetical protein MGC1203 (MGC1203), mRNA  |
| NM_024294 | Homo sapiens hypothetical protein MGC4614 (MGC4614), mRNA  |
| NM_024292 | Homo sapiens ubiquitin-like 5 (UBL5), mRNA   |
| NM_024012 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 5A (HTR5A), mRNA   |
| NM_024123 | Homo sapiens putative Ly-6 superfamily member (G6E), mRNA  |
| NM_021904 | Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 3, mRNA   |
| NM_021903 | Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1),  |

# Country Application

Thursday, June 17, 2004

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**Case Number:** 99-424      **Country:** HK      **SubCase:** U  
**Client:** CV Therapeutics      Hong Kong  
**Title:** C-Pyrazole A2A Receptor Agonists  
**Case Type:** ORD      **Application Status:** Published  
**Application Number:** 02106508.0      **Filing Date:** 21-Jun-2000.  
**Publication Number:** tbd      **Publication Date:** 08-Nov-2002  
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**Parent Issue Number:**      **Parent Issue Date :**  
**Tax Schedule:** SE      **Expiration Date:**  
**Confirmation #:**      **Patent Term Adjustment:** 0  
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**File Out To:**  
**Agent:** LTI      **Client Reference #:** PSD02485  
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**Family Reference:**  
**Remarks:** Filed with the patent registry of Hong Kong 09-04-02  
**Assignee:**      **Working Atty:** ABH      **Backup Atty:** PST

## List Of Actions

| Action(s) Due                 | Due Date    | Action Taken |
|-------------------------------|-------------|--------------|
| Instruct RE: 2nd Stage Filing | 24-Jun-2004 | Reminder     |
| Instruct RE: 2nd Stage Filing | 01-Jul-2004 | Due Date     |

**User ID:** koll

**Date Created:** 06-Sep-2002

**Last Update:** 31-Mar-2004

|           |  |
|-----------|--|
|           | transcript variant 2, mRNA   |
| NM_001470 | Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 1, mRNA   |
| NM_001858 | Homo sapiens collagen, type XIX, alpha 1 (COL19A1), mRNA   |
| NM_015071 | Homo sapiens GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0621 protein (KIAA0621), mRNA  |
| NM_007329 | Homo sapiens deleted in malignant brain tumors 1 (DMBT1), transcript variant 2, mRNA   |
| NM_023004 | Homo sapiens nogo receptor (NOGOR), mRNA   |
| NM_005371 | Homo sapiens methyltransferase-like 1 (METTL1), transcript variant 1, mRNA   |
| NM_023033 | Homo sapiens methyltransferase-like 1 (METTL1), transcript variant 3, mRNA   |
| NM_023032 | Homo sapiens methyltransferase-like 1 (METTL1), transcript variant 2, mRNA   |
| NM_014289 | Homo sapiens calpain 6 (CAPN6), mRNA   |
| NM_023089 | Homo sapiens calpain 10 (CAPN10), transcript variant 7, mRNA   |
| NM_023088 | Homo sapiens calpain 10 (CAPN10), transcript variant 6, mRNA   |
| NM_023087 | Homo sapiens calpain 10 (CAPN10), transcript variant 5, mRNA   |
| NM_023086 | Homo sapiens calpain 10 (CAPN10), transcript variant 4, mRNA   |
| NM_023085 | Homo sapiens calpain 10 (CAPN10), transcript variant 3, mRNA   |
| NM_023084 | Homo sapiens calpain 10 (CAPN10), transcript variant 2, mRNA   |
| NM_023083 | Homo sapiens calpain 10 (CAPN10), transcript variant 1, mRNA   |
| NM_021251 | Homo sapiens calpain 10 (CAPN10), transcript variant 8, mRNA   |
| NM_005083 | Homo sapiens U2 small nuclear ribonucleoprotein auxiliary factor, small subunit 1 (U2AF1RS1), mRNA   |
| NM_023031 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 13, mRNA |
| NM_023030 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 12, mRNA |
| NM_023028 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 10, mRNA |
| NM_022976 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 9, mRNA  |
| NM_022975 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 8, mRNA  |
| NM_022974 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 7, mRNA  |
| NM_022973 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 6, mRNA  |
| NM_022972 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase,   |

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|           | keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 5, mRNA   |
| NM_022971 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 4, mRNA  |
| NM_022970 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 3, mRNA  |
| NM_022969 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 2, mRNA  |
| NM_015850 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 2, mRNA  |
| NM_023111 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 9, mRNA  |
| NM_023110 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 8, mRNA  |
| NM_023109 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 7, mRNA  |
| NM_023029 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 11, mRNA |
| NM_023108 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 6, mRNA  |
| NM_000141 | Homo sapiens fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) (FGFR2), transcript variant 1, mRNA  |
| NM_023107 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 5, mRNA  |
| NM_023106 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 4, mRNA  |
| NM_023105 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 3, mRNA  |
| NM_000604 | Homo sapiens fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, Pfeiffer syndrome) (FGFR1), transcript variant 1, mRNA  |
| NM_024018 | Homo sapiens butyrophilin, subfamily 2, member A3 (BTN2A3), mRNA   |
| NM_017614 | Homo sapiens betaine-homocysteine methyltransferase 2 (BHMT2), mRNA  |
| NM_005434 | Homo sapiens BENE protein (BENE), mRNA   |
| NM_000351 | Homo sapiens steroid sulfatase (microsomal), arylsulfatase C, isozyme S (STS), mRNA  |
| NM_024105 | Homo sapiens hypothetical protein MGC3136 (MGC3136), mRNA  |
| NM_024098 | Homo sapiens hypothetical protein MGC2574 (MGC2574), mRNA  |
| NM_024096 | Homo sapiens hypothetical protein MGC5627 (MGC5627), mRNA  |
| NM_024095 | Homo sapiens hypothetical protein MGC5540 (MGC5540), mRNA  |
| NM_024091 | Homo sapiens hypothetical protein MGC5297 (MGC5297), mRNA  |
| NM_024089 | Homo sapiens hypothetical protein MGC5302 (MGC5302), mRNA  |



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| NM_024082 | Homo sapiens transmembrane gamma-carboxylglutamic acid protein 3 (TMG3), mRNA   |
| NM_024081 | Homo sapiens transmembrane gamma-carboxylglutamic acid protein 4 (TMG4), mRNA   |
| NM_024079 | Homo sapiens hypothetical protein MGC2840 similar to a putative glucosyltransferase (MGC2840), mRNA                         |
| NM_024078 | Homo sapiens hypothetical protein MGC3162 (MGC3162), mRNA   |
| NM_024075 | Homo sapiens LENG5 protein (LENG5), mRNA  |
| NM_024073 | Homo sapiens hypothetical protein MGC2875 (MGC2875), mRNA   |
| NM_024060 | Homo sapiens hypothetical protein MGC5395 (MGC5395), mRNA   |
| NM_024056 | Homo sapiens hypothetical protein MGC5576 (MGC5576), mRNA   |
| NM_024054 | Homo sapiens hypothetical protein MGC2821 (MGC2821), mRNA   |
| NM_024051 | Homo sapiens hypothetical protein MGC3077 (MGC3077), mRNA   |
| NM_024047 | Homo sapiens hypothetical protein MGC3037 (MGC3037), mRNA   |
| NM_024044 | Homo sapiens hypothetical protein MGC5178 (MGC5178), mRNA   |
| NM_024043 | Homo sapiens hypothetical protein MGC3101 (MGC3101), mRNA   |
| NM_024035 | Homo sapiens hypothetical protein MGC3113 (MGC3113), mRNA   |
| NM_024034 | Homo sapiens hypothetical protein MGC3129 similar to ganglioside-induced differentiation-associated protein (MGC3129), mRNA |
| NM_024009 | Homo sapiens gap junction protein, beta 3, 31kD (connexin 31) (GJB3), mRNA  |
| NM_024013 | Homo sapiens interferon, alpha 1 (IFNA1), mRNA  |
| NM_000521 | Homo sapiens hexosaminidase B (beta polypeptide) (HEXB), mRNA   |
| NM_000520 | Homo sapiens hexosaminidase A (alpha polypeptide) (HEXA), mRNA  |
| NM_006044 | Homo sapiens histone deacetylase 6 (HDAC6), mRNA  |
| NM_003883 | Homo sapiens histone deacetylase 3 (HDAC3), mRNA  |
| NM_004964 | Homo sapiens histone deacetylase 1 (HDAC1), mRNA  |
| NM_001492 | Homo sapiens growth differentiation factor 1 (GDF1), mRNA   |
| NM_018486 | Homo sapiens histone deacetylase 8 (HDAC8), mRNA  |
| NM_005089 | Homo sapiens U2 small nuclear ribonucleoprotein auxiliary factor, small subunit 2 (U2AF1RS2), mRNA                          |
| NM_004285 | Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA  |
| NM_007210 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 6 (GalNAc-T6) (GALNT6), mRNA    |
| NM_003774 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 4 (GalNAc-T4) (GALNT4), mRNA    |
| NM_020474 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 1 (GalNAc-T1) (GALNT1), mRNA    |
| NM_015507 | Homo sapiens EGF-like-domain, multiple 6 (EGFL6), mRNA  |
| NM_004942 | Homo sapiens defensin, beta 2 (DEFB2), mRNA   |
| NM_005218 | Homo sapiens defensin, beta 1 (DEFB1), mRNA   |
| NM_002474 | Homo sapiens myosin, heavy polypeptide 11, smooth muscle (MYH11), transcript variant SM1, mRNA                              |
| NM_022870 | Homo sapiens myosin, heavy polypeptide 11, smooth muscle (MYH11), transcript variant SM3, mRNA                              |
| NM_022844 | Homo sapiens myosin, heavy polypeptide 11, smooth muscle (MYH11), transcript variant SM2, mRNA                              |
| NM_001755 | Homo sapiens core-binding factor, beta subunit (CBFB), transcript variant 2, mRNA   |
| NM_016458 | Homo sapiens hypothetical protein (LOC51236), mRNA  |
| NM_020836 | Homo sapiens KIAA1446 protein (KIAA1446), mRNA  |
| NM_015407 | Homo sapiens DKFZP564O243 protein (DKFZP564O243), mRNA  |

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| NM_015062 | Homo sapiens KIAA0595 protein (KIAA0595), mRNA  |
| NM_019100 | Homo sapiens DNA methyltransferase 1-associated protein 1 (DMAP1), mRNA   |
| NM_015442 | Homo sapiens hypothetical protein FLJ12890 (FLJ12890), mRNA   |
| NM_023948 | Homo sapiens hypothetical protein AF053356_CDS3 (AF053356_CDS3), mRNA   |
| NM_022036 | Homo sapiens G protein-coupled receptor, family C, group 5, member C (GPC5C), transcript variant 1, mRNA                      |
| NM_018653 | Homo sapiens G protein-coupled receptor, family C, group 5, member C (GPC5C), transcript variant 2, mRNA                      |
| NM_000707 | Homo sapiens arginine vasopressin receptor 1B (AVPR1B), mRNA  |
| NM_000706 | Homo sapiens arginine vasopressin receptor 1A (AVPR1A), mRNA  |
| NM_021923 | Homo sapiens fibroblast growth factor receptor-like 1 (FGFRL1), mRNA  |
| NM_002011 | Homo sapiens fibroblast growth factor receptor 4 (FGFR4), transcript variant 1, mRNA  |
| NM_022963 | Homo sapiens fibroblast growth factor receptor 4 (FGFR4), transcript variant 2, mRNA  |
| NM_022965 | Homo sapiens fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 2, mRNA |
| NM_000142 | Homo sapiens fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 1, mRNA |
| NM_022336 | Homo sapiens ectodysplasin 1, anhidrotic receptor (EDAR), mRNA  |
| NM_018654 | Homo sapiens G protein-coupled receptor, family C, group 5, member D (GPC5D), mRNA  |
| NM_002534 | Homo sapiens 2',5'-oligoadenylate synthetase 1 (40-46 kD) (OAS1), transcript variant E16, mRNA                                |
| NM_016816 | Homo sapiens 2',5'-oligoadenylate synthetase 1 (40-46 kD) (OAS1), transcript variant E18, mRNA                                |
| NM_014501 | Homo sapiens ubiquitin carrier protein (E2-EPF), mRNA   |
| NM_000595 | Homo sapiens lymphotoxin alpha (TNF superfamily, member 1) (LTA), mRNA  |
| NM_007040 | Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA   |
| NM_001232 | Homo sapiens calsequestrin 2 (cardiac muscle) (CASQ2), mRNA   |
| NM_001231 | Homo sapiens calsequestrin 1 (fast-twitch, skeletal muscle) (CASQ1), nuclear gene encoding mitochondrial protein, mRNA        |
| NM_003925 | Homo sapiens methyl-CpG binding domain protein 4 (MBD4), mRNA   |
| NM_002059 | Homo sapiens growth hormone 2 (GH2), transcript variant 1, mRNA   |
| NM_022558 | Homo sapiens growth hormone 2 (GH2), transcript variant 3, mRNA   |
| NM_022557 | Homo sapiens growth hormone 2 (GH2), transcript variant 2, mRNA   |
| NM_022556 | Homo sapiens growth hormone 2 (GH2), transcript variant 4, mRNA   |
| NM_022562 | Homo sapiens growth hormone 1 (GH1), transcript variant 5, mRNA   |
| NM_022561 | Homo sapiens growth hormone 1 (GH1), transcript variant 4, mRNA   |
| NM_022560 | Homo sapiens growth hormone 1 (GH1), transcript variant 3, mRNA   |
| NM_022559 | Homo sapiens growth hormone 1 (GH1), transcript variant 2, mRNA   |
| NM_000515 | Homo sapiens growth hormone 1 (GH1), transcript variant 1, mRNA   |
| NM_021801 | Homo sapiens matrix metalloproteinase 26 (MMP26), mRNA  |
| NM_022718 | Homo sapiens matrix metalloproteinase 25 (MMP25), transcript variant 2, mRNA  |
| NM_022468 | Homo sapiens matrix metalloproteinase 25 (MMP25), transcript variant 1, mRNA  |
| NM_006690 | Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA  |
| NM_004771 | Homo sapiens matrix metalloproteinase 20 (enamelysin) (MMP20), mRNA   |
| NM_002423 | Homo sapiens matrix metalloproteinase 7 (matrilysin, uterine) (MMP7), mRNA  |

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| NM_002422 | Homo sapiens matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3), mRNA                            |
| NM_005941 | Homo sapiens matrix metalloproteinase 16 (membrane-inserted) (MMP16), transcript variant 1, mRNA               |
| NM_022564 | Homo sapiens matrix metalloproteinase 16 (membrane-inserted) (MMP16), transcript variant 2, mRNA               |
| NM_002421 | Homo sapiens matrix metalloproteinase 1 (interstitial collagenase) (MMP1), mRNA                                |
| NM_004995 | Homo sapiens matrix metalloproteinase 14 (membrane-inserted) (MMP14), mRNA                                     |
| NM_002427 | Homo sapiens matrix metalloproteinase 13 (collagenase 3) (MMP13), mRNA   |
| NM_005940 | Homo sapiens matrix metalloproteinase 11 (stromelysin 3) (MMP11), mRNA   |
| NM_022792 | Homo sapiens matrix metalloproteinase 19 (MMP19), transcript variant rasi-9, mRNA                              |
| NM_022791 | Homo sapiens matrix metalloproteinase 19 (MMP19), transcript variant rasi-6, mRNA                              |
| NM_022790 | Homo sapiens matrix metalloproteinase 19 (MMP19), transcript variant rasi-3, mRNA                              |
| NM_002429 | Homo sapiens matrix metalloproteinase 19 (MMP19), transcript variant rasi-1, mRNA                              |
| NM_004530 | Homo sapiens matrix metalloproteinase 2 (gelatinase A, 72kD gelatinase, 72kD type IV collagenase) (MMP2), mRNA |
| NM_004994 | Homo sapiens matrix metalloproteinase 9 (gelatinase B, 92kD gelatinase, 92kD type IV collagenase) (MMP9), mRNA |
| NM_004142 | Homo sapiens matrix metalloproteinase-like 1 (MMPL1), mRNA   |
| NM_002424 | Homo sapiens matrix metalloproteinase 8 (neutrophil collagenase) (MMP8), mRNA                                  |
| NM_002428 | Homo sapiens matrix metalloproteinase 15 (membrane-inserted) (MMP15), mRNA                                     |
| NM_002426 | Homo sapiens matrix metalloproteinase 12 (macrophage elastase) (MMP12), mRNA                                   |
| NM_002425 | Homo sapiens matrix metalloproteinase 10 (stromelysin 2) (MMP10), mRNA   |
| NM_022804 | Homo sapiens SNRPN upstream reading frame (SNURF), transcript variant 2, mRNA                                  |
| NM_005678 | Homo sapiens SNRPN upstream reading frame (SNURF), transcript variant 1, mRNA                                  |
| NM_003097 | Homo sapiens small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 1, mRNA                 |
| NM_022808 | Homo sapiens small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 5, mRNA                 |
| NM_022807 | Homo sapiens small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 4, mRNA                 |
| NM_022806 | Homo sapiens small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 3, mRNA                 |
| NM_022805 | Homo sapiens small nuclear ribonucleoprotein polypeptide N (SNRPN), transcript variant 2, mRNA                 |
| NM_022717 | Homo sapiens U1-snRNP binding protein homolog (70kD) (U1SNRNPBP), transcript variant 2, mRNA                   |
| NM_006759 | Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA  |
| NM_001400 | Homo sapiens endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 (EDG1), mRNA              |
| NM_005586 | Homo sapiens MyoD family inhibitor (MDFI), mRNA  |

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| NM_022978 | Homo sapiens small EDRK-rich factor 1B (centromeric) (SERF1B), mRNA                            |
| NM_023947 | Homo sapiens hypothetical protein MGC3234 (MGC3234), mRNA                                      |
| NM_023942 | Homo sapiens hypothetical protein MGC3036 (MGC3036), mRNA                                      |
| NM_023933 | Homo sapiens hypothetical protein MGC2494 (MGC2494), mRNA                                      |
| NM_005471 | Homo sapiens glucosamine-6-phosphate isomerase (GNPI), mRNA                                    |
| NM_023925 | Homo sapiens hypothetical protein FLJ22569 (FLJ22569), mRNA                                    |
| NM_004076 | Homo sapiens crystallin, beta B3 (CRYBB3), mRNA  |
| NM_015717 | Homo sapiens Langerhans cell specific c-type lectin (LANGERIN), mRNA                           |
| NM_012329 | Homo sapiens monocyte to macrophage differentiation-associated (MMD), mRNA                     |
| NM_007020 | Homo sapiens U1-snRNP binding protein homolog (70kD) (UISNRNPBP), transcript variant 1, mRNA   |
| NM_006465 | Homo sapiens dead ringer (Drosophila)-like 2 (bright and dead ringer) (DRIL2), mRNA            |
| NM_000015 | Homo sapiens N-acetyltransferase 2 (arylamine N-acetyltransferase) (NAT2), mRNA                |
| NM_000496 | Homo sapiens crystallin, beta B2 (CRYBB2), mRNA  |
| NM_001886 | Homo sapiens crystallin, beta A4 (CRYBA4), mRNA  |
| NM_023080 | Homo sapiens hypothetical protein FLJ20989 (FLJ20989), mRNA                                    |
| NM_023039 | Homo sapiens ankyrin repeat, family A (RFXANK-like), 2 (ANKRA2), mRNA                          |
| NM_021905 | Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 4, mRNA |
| NM_020554 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6d1, mRNA                |
| NM_020553 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6c1, mRNA                |
| NM_020552 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6b1, mRNA                |
| NM_020550 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6a3, mRNA                |
| NM_012468 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6a1, mRNA                |
| NM_014418 | Homo sapiens T-cell leukemia/lymphoma 6 (TCL6), transcript variant TCL6a2, mRNA                |
| NM_016730 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 3, mRNA                     |
| NM_016729 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 4, mRNA                     |
| NM_016725 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 1, mRNA                     |
| NM_016724 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 7, mRNA                     |
| NM_016025 | Homo sapiens CGI-81 protein (DREV1), mRNA  |
| NM_004406 | Homo sapiens deleted in malignant brain tumors 1 (DMBT1), transcript variant 1, mRNA           |
| NM_000197 | Homo sapiens hydroxysteroid (17-beta) dehydrogenase 3 (HSD17B3), mRNA                          |
| NM_001220 | Homo sapiens calcium/calmodulin-dependent protein kinase (CaM kinase) II beta (CAMK2B), mRNA   |
| NM_019071 | Homo sapiens inhibitor of growth family, member 3 (ING3), mRNA                                 |
| NM_016731 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 8, mRNA                     |
| NM_023018 | Homo sapiens hypothetical protein FLJ13052 (FLJ13052), mRNA                                    |
| NM_023016 | Homo sapiens hypothetical protein FLJ21870 (FLJ21870), mRNA                                    |
| NM_022911 | Homo sapiens solute carrier family 26, member 6 (SLC26A6), mRNA                                |
| NM_021071 | Homo sapiens ADP-ribosyltransferase 4 (ART4), mRNA   |
| NM_022113 | Homo sapiens kinesin family member 13A (KIF13A), mRNA  |
| NM_012449 | Homo sapiens six transmembrane epithelial antigen of the prostate (STEAP), mRNA                |

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|           | mRNA  |
| NM_016513 | Homo sapiens MAK-related kinase (KIAA0936), mRNA  |
| NM_014920 | Homo sapiens MAK-related kinase (KIAA0936), mRNA  |
| NM_014688 | Homo sapiens related to the N terminus of tre (RNTRE), mRNA   |
| NM_006640 | Homo sapiens MLL septin-like fusion (MSF), mRNA   |
| NM_006070 | Homo sapiens TRK-fused gene (TFG), mRNA   |
| NM_004809 | Homo sapiens stomatin-like 1 (STOML1), mRNA   |
| NM_000297 | Homo sapiens polycystic kidney disease 2 (autosomal dominant) (PKD2), mRNA  |
| NM_016307 | Homo sapiens paired related homeobox protein (PRX2), mRNA   |
| NM_003924 | Homo sapiens paired mesoderm homeobox 2b (PMX2B), mRNA  |
| NM_006902 | Homo sapiens paired mesoderm homeo box 1 (PMX1), transcript variant pmx-1a, mRNA  |
| NM_022716 | Homo sapiens paired mesoderm homeo box 1 (PMX1), transcript variant pmx-1b, mRNA  |
| NM_000916 | Homo sapiens oxytocin receptor (OXTR), mRNA   |
| NM_000915 | Homo sapiens oxytocin, prepro- (neurophysin I) (OXT), mRNA  |
| NM_006188 | Homo sapiens oncomodulin (OCM), mRNA  |
| NM_022664 | Homo sapiens extracellular matrix protein 1 (ECM1), transcript variant 2, mRNA  |
| NM_004092 | Homo sapiens enoyl Coenzyme A hydratase, short chain, 1, mitochondrial (ECHS1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_022652 | Homo sapiens dual specificity phosphatase 6 (DUSP6), transcript variant 2, mRNA   |
| NM_004419 | Homo sapiens dual specificity phosphatase 5 (DUSP5), mRNA   |
| NM_004425 | Homo sapiens extracellular matrix protein 1 (ECM1), transcript variant 1, mRNA  |
| NM_004418 | Homo sapiens dual specificity phosphatase 2 (DUSP2), mRNA   |
| NM_004961 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, epsilon (GABRE), transcript variant 1, mRNA                               |
| NM_021990 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, epsilon (GABRE), transcript variant 4, mRNA                               |
| NM_021987 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, epsilon (GABRE), transcript variant 3, mRNA                               |
| NM_021984 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, epsilon (GABRE), transcript variant 2, mRNA                               |
| NM_004090 | Homo sapiens dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) (DUSP3), mRNA                                |
| NM_001398 | Homo sapiens enoyl Coenzyme A hydratase 1, peroxisomal (ECH1), mRNA   |
| NM_001946 | Homo sapiens dual specificity phosphatase 6 (DUSP6), transcript variant 1, mRNA   |
| NM_001952 | Homo sapiens E2F transcription factor 6 (E2F6), mRNA  |
| NM_001950 | Homo sapiens E2F transcription factor 4, p107/p130-binding (E2F4), mRNA   |
| NM_001949 | Homo sapiens E2F transcription factor 3 (E2F3) mRNA, complete cds   |
| NM_005225 | Homo sapiens E2F transcription factor 1 (E2F1), mRNA  |
| NM_022977 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4), transcript variant 2, mRNA                                       |
| NM_004457 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 3 (FACL3), mRNA   |
| NM_021122 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 2 (FACL2), mRNA   |
| NM_002473 | Homo sapiens myosin, heavy polypeptide 9, non-muscle (MYH9), mRNA   |
| NM_001926 | Homo sapiens defensin, alpha 6, Paneth cell-specific (DEFA6), mRNA  |
| NM_005217 | Homo sapiens defensin, alpha 3, neutrophil-specific (DEFA3), mRNA   |

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| NM_021912 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, beta 3 (GABRB3), transcript variant 2, mRNA                |
| NM_021911 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, beta 2 (GABRB2), transcript variant 1, mRNA                |
| NM_000814 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, beta 3 (GABRB3), transcript variant 1, mRNA                |
| NM_000812 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, beta 1 (GABRB1), mRNA                                      |
| NM_022650 | Homo sapiens RAS p21 protein activator (GTPase activating protein) 1 (RASA1), transcript variant 2, mRNA           |
| NM_003259 | Homo sapiens intercellular adhesion molecule 5, telencephalin (ICAM5), mRNA  |
| NM_022377 | Homo sapiens intercellular adhesion molecule 4, Landsteiner-Wiener blood group (ICAM4), transcript variant 2, mRNA |
| NM_001544 | Homo sapiens intercellular adhesion molecule 4, Landsteiner-Wiener blood group (ICAM4), transcript variant 1, mRNA |
| NM_002162 | Homo sapiens intercellular adhesion molecule 3 (ICAM3), mRNA   |
| NM_000873 | Homo sapiens intercellular adhesion molecule 2 (ICAM2), mRNA   |
| NM_022308 | Homo sapiens islet cell autoantigen 1 (69kD) (ICA1), transcript variant 3, mRNA                                    |
| NM_022307 | Homo sapiens islet cell autoantigen 1 (69kD) (ICA1), transcript variant 1, mRNA                                    |
| NM_022581 | Homo sapiens chorionic somatomammotropin hormone-like 1 (CSHL1), transcript variant 5, mRNA                        |
| NM_022580 | Homo sapiens chorionic somatomammotropin hormone-like 1 (CSHL1), transcript variant 4, mRNA                        |
| NM_022579 | Homo sapiens chorionic somatomammotropin hormone-like 1 (CSHL1), transcript variant 3, mRNA                        |
| NM_022578 | Homo sapiens chorionic somatomammotropin hormone-like 1 (CSHL1), transcript variant 2, mRNA                        |
| NM_001318 | Homo sapiens chorionic somatomammotropin hormone-like 1 (CSHL1), transcript variant 1, mRNA                        |
| NM_022646 | Homo sapiens chorionic somatomammotropin hormone 2 (CSH2), transcript variant 4, mRNA                              |
| NM_022645 | Homo sapiens chorionic somatomammotropin hormone 2 (CSH2), transcript variant 3, mRNA                              |
| NM_022644 | Homo sapiens chorionic somatomammotropin hormone 2 (CSH2), transcript variant 2, mRNA                              |
| NM_020991 | Homo sapiens chorionic somatomammotropin hormone 2 (CSH2), transcript variant 1, mRNA                              |
| NM_022642 | Homo sapiens chorionic somatomammotropin hormone 1 (placental lactogen) (CSH1), transcript variant 4, mRNA         |
| NM_022641 | Homo sapiens chorionic somatomammotropin hormone 1 (placental lactogen) (CSH1), transcript variant 3, mRNA         |
| NM_022640 | Homo sapiens chorionic somatomammotropin hormone 1 (placental lactogen) (CSH1), transcript variant 2, mRNA         |
| NM_001317 | Homo sapiens chorionic somatomammotropin hormone 1 (placental lactogen) (CSH1), transcript variant 1, mRNA         |
| NM_002371 | Homo sapiens mal, T-cell differentiation protein (MAL), transcript variant a, mRNA                                 |
| NM_022440 | Homo sapiens mal, T-cell differentiation protein (MAL), transcript variant d, mRNA                                 |
| NM_022439 | Homo sapiens mal, T-cell differentiation protein (MAL), transcript variant c, mRNA                                 |

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|           | mRNA  |
| NM_022438 | Homo sapiens mal, T-cell differentiation protein (MAL), transcript variant b, mRNA  |
| NM_001790 | Homo sapiens cell division cycle 25C (CDC25C), transcript variant 1, mRNA   |
| NM_022809 | Homo sapiens cell division cycle 25C (CDC25C), transcript variant 2, mRNA   |
| NM_021141 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining; Ku autoantigen, 80kD) (XRCC5), mRNA |
| NM_022550 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), transcript variant 3, mRNA                                 |
| NM_022406 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), transcript variant 2, mRNA                                 |
| NM_005432 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 3 (XRCC3), mRNA   |
| NM_003401 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), transcript variant 1, mRNA                                 |
| NM_022405 | Homo sapiens X transporter protein 3 (XT3), transcript variant 2, mRNA  |
| NM_016192 | Homo sapiens transmembrane protein with EGF-like and two follistatin-like domains 2 (TMEFF2), mRNA  |
| NM_006786 | Homo sapiens urotensin 2 (UTS2), transcript variant 2, mRNA   |
| NM_021995 | Homo sapiens urotensin 2 (UTS2), transcript variant 1, mRNA   |
| NM_003353 | Homo sapiens urocortin (UCN), mRNA  |
| NM_021991 | Homo sapiens junction plakoglobin (JUP), transcript variant 2, mRNA   |
| NM_021737 | Homo sapiens chloride channel 6 (CLCN6), transcript variant CIC-6d, mRNA  |
| NM_021736 | Homo sapiens chloride channel 6 (CLCN6), transcript variant CIC-6c, mRNA  |
| NM_021735 | Homo sapiens chloride channel 6 (CLCN6), transcript variant CIC-6b, mRNA  |
| NM_006536 | Homo sapiens chloride channel, calcium activated, family member 2 (CLCA2), mRNA   |
| NM_004000 | Homo sapiens chitinase 3-like 2 (CHI3L2), mRNA  |
| NM_002641 | Homo sapiens phosphatidylinositol glycan, class A (paroxysmal nocturnal hemoglobinuria) (PIGA), transcript variant 1, mRNA                              |
| NM_020473 | Homo sapiens phosphatidylinositol glycan, class A (paroxysmal nocturnal hemoglobinuria) (PIGA), transcript variant 3, mRNA                              |
| NM_020472 | Homo sapiens phosphatidylinositol glycan, class A (paroxysmal nocturnal hemoglobinuria) (PIGA), transcript variant 2, mRNA                              |
| NM_001699 | Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 2, mRNA   |
| NM_021913 | Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA   |
| NM_016188 | Homo sapiens actin-like 6 (ACTL6), mRNA   |
| NM_000509 | Homo sapiens fibrinogen, gamma polypeptide (FGG), transcript variant gamma-A, mRNA  |
| NM_021870 | Homo sapiens fibrinogen, gamma polypeptide (FGG), transcript variant gamma-B, mRNA  |
| NM_005141 | Homo sapiens fibrinogen, B beta polypeptide (FGB), mRNA   |
| NM_021871 | Homo sapiens fibrinogen, A alpha polypeptide (FGA), transcript variant alpha, mRNA  |
| NM_000508 | Homo sapiens fibrinogen, A alpha polypeptide (FGA), transcript variant alpha-E, mRNA  |
| NM_000920 | Homo sapiens pyruvate carboxylase (PC), nuclear gene encoding mitochondrial protein, transcript variant A, mRNA   |
| NM_022172 | Homo sapiens pyruvate carboxylase (PC), nuclear gene encoding mitochondrial protein, transcript variant 2, mRNA   |
| NM_004358 | Homo sapiens cell division cycle 25B (CDC25B), transcript variant 1, mRNA   |
| NM_021874 | Homo sapiens cell division cycle 25B (CDC25B), transcript variant 4, mRNA   |

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| NM_021873 | Homo sapiens cell division cycle 25B (CDC25B), transcript variant 3, mRNA   |
| NM_021872 | Homo sapiens cell division cycle 25B (CDC25B), transcript variant 2, mRNA   |
| NM_020990 | Homo sapiens creatine kinase, mitochondrial 1 (ubiquitous) (CKMT1), nuclear gene encoding mitochondrial protein, mRNA                             |
| NM_021962 | Homo sapiens active BCR-related gene (ABR), transcript variant 1, mRNA  |
| NM_001092 | Homo sapiens active BCR-related gene (ABR), transcript variant 2, mRNA  |
| NM_021794 | Homo sapiens a disintegrin and metalloproteinase domain 30 (ADAM30), transcript variant 1, mRNA   |
| NM_001464 | Homo sapiens a disintegrin and metalloproteinase domain 2 (fertilin beta) (ADAM2), mRNA   |
| NM_021780 | Homo sapiens a disintegrin and metalloproteinase domain 29 (ADAM29), transcript variant 2, mRNA   |
| NM_021779 | Homo sapiens a disintegrin and metalloproteinase domain 29 (ADAM29), transcript variant 3, mRNA   |
| NM_014269 | Homo sapiens a disintegrin and metalloproteinase domain 29 (ADAM29), transcript variant 1, mRNA   |
| NM_021723 | Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA   |
| NM_021722 | Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA   |
| NM_021721 | Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA   |
| NM_016351 | Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA   |
| NM_021832 | Homo sapiens a disintegrin and metalloproteinase domain 17 (tumor necrosis factor, alpha, converting enzyme) (ADAM17), transcript variant 2, mRNA |
| NM_003183 | Homo sapiens a disintegrin and metalloproteinase domain 17 (tumor necrosis factor, alpha, converting enzyme) (ADAM17), transcript variant 1, mRNA |
| NM_003815 | Homo sapiens a disintegrin and metalloproteinase domain 15 (metargidin) (ADAM15), mRNA  |
| NM_021641 | Homo sapiens a disintegrin and metalloproteinase domain 12 (meltrin alpha) (ADAM12), transcript variant 2, mRNA                                   |
| NM_021612 | Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11), transcript variant 2, mRNA   |
| NM_006437 | Homo sapiens ADP-ribosyltransferase (NAD <sup>+</sup> ; poly (ADP-ribose) polymerase)-like 1 (ADPRTL1), mRNA                                      |
| NM_001618 | Homo sapiens ADP-ribosyltransferase (NAD <sup>+</sup> ; poly (ADP-ribose) polymerase) (ADPRT), mRNA   |
| NM_021738 | Homo sapiens supervillin (SVIL), transcript variant 2, mRNA   |
| NM_003174 | Homo sapiens supervillin (SVIL), transcript variant 1, mRNA   |
| NM_002505 | Homo sapiens nuclear transcription factor Y, alpha (NFYA), transcript variant 1, mRNA   |
| NM_021705 | Homo sapiens nuclear transcription factor Y, alpha (NFYA), transcript variant 2, mRNA   |
| NM_000832 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 1 (GRIN1), transcript variant NR1-1, mRNA                                       |
| NM_000673 | Homo sapiens alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide (ADH7), mRNA   |
| NM_000671 | Homo sapiens alcohol dehydrogenase 5 (class III), chi polypeptide (ADH5), mRNA  |
| NM_000670 | Homo sapiens alcohol dehydrogenase 4 (class II), pi polypeptide (ADH4), mRNA  |



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| NM_001832 | Homo sapiens colipase, pancreatic (CLPS), mRNA  |
| NM_021795 | Homo sapiens ELK4, ETS-domain protein (SRF accessory protein 1) (ELK4), transcript variant b, mRNA  |
| NM_021709 | Homo sapiens CD27-binding (Siva) protein (SIVA), transcript variant 2, mRNA   |
| NM_006427 | Homo sapiens CD27-binding (Siva) protein (SIVA), transcript variant 1, mRNA   |
| NM_021804 | Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA  |
| NM_020208 | Homo sapiens X transporter protein 3 (XT3), transcript variant 1, mRNA  |
| NM_021030 | Homo sapiens zinc finger protein 14 (KOX 6) (ZNF14), mRNA   |
| NM_020485 | Homo sapiens Rhesus blood group, CcEe antigens (RHCE), mRNA   |
| NM_016232 | Homo sapiens interleukin 1 receptor-like 1 (IL1RL1), mRNA   |
| NM_001680 | Homo sapiens FXYD domain-containing ion transport regulator 2 (FXYD2), transcript variant a, mRNA   |
| NM_021603 | Homo sapiens FXYD domain-containing ion transport regulator 2 (FXYD2), transcript variant b, mRNA   |
| NM_005387 | Homo sapiens nucleoporin 98kD (NUP98), mRNA   |
| NM_021602 | Homo sapiens CD79B antigen (immunoglobulin-associated beta) (CD79B), transcript variant 2, mRNA   |
| NM_000626 | Homo sapiens CD79B antigen (immunoglobulin-associated beta) (CD79B), transcript variant 1, mRNA   |
| NM_021601 | Homo sapiens CD79A antigen (immunoglobulin-associated alpha) (CD79A), transcript variant 2, mRNA  |
| NM_021599 | Homo sapiens a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 2 (ADAMTS2), transcript variant 2, mRNA |
| NM_006988 | Homo sapiens a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 1 (ADAMTS1), mRNA                       |
| NM_004069 | Homo sapiens adaptor-related protein complex 2, sigma 1 subunit (AP2S1), transcript variant AP17, mRNA  |
| NM_021575 | Homo sapiens adaptor-related protein complex 2, sigma 1 subunit (AP2S1), transcript variant AP17delta, mRNA                                     |
| NM_021574 | Homo sapiens breakpoint cluster region (BCR), transcript variant 2, mRNA  |
| NM_004327 | Homo sapiens breakpoint cluster region (BCR), transcript variant 1, mRNA  |
| NM_007327 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 1 (GRIN1), transcript variant NR1-3, mRNA                                     |
| NM_021569 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 1 (GRIN1), transcript variant NR1-2, mRNA                                     |
| NM_020984 | Homo sapiens choline acetyltransferase (CHAT), transcript variant R, mRNA   |
| NM_020985 | Homo sapiens choline acetyltransferase (CHAT), transcript variant N1, mRNA  |
| NM_020549 | Homo sapiens choline acetyltransferase (CHAT), transcript variant M, mRNA   |
| NM_001615 | Homo sapiens actin, gamma 2, smooth muscle, enteric (ACTG2), mRNA   |
| NM_020986 | Homo sapiens choline acetyltransferase (CHAT), transcript variant N2, mRNA  |
| NM_018662 | Homo sapiens disrupted in schizophrenia 1 (DISC1), mRNA   |
| NM_018406 | Homo sapiens mucin 4, tracheobronchial (MUC4), mRNA   |
| NM_017783 | Homo sapiens hypothetical protein FLJ20357 (FLJ20357), mRNA   |
| NM_004532 | Homo sapiens mucin 4, tracheobronchial (MUC4), mRNA   |
| NM_012215 | Homo sapiens meningioma expressed antigen 5 (hyaluronidase) (MGEA5), mRNA   |
| NM_020326 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 4 (ABCD4), transcript variant 5, mRNA   |
| NM_020325 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 4 (ABCD4), transcript variant 4, mRNA   |
| NM_020324 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 4 (ABCD4),  |

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|           | transcript variant 3, mRNA   |
| NM_020323 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 4 (ABCD4), transcript variant 2, mRNA                    |
| NM_020298 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 9 (ABCC9), transcript variant SUR2A-delta-14, mRNA  |
| NM_020297 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 9 (ABCC9), transcript variant SUR2B, mRNA           |
| NM_021270 | Homo sapiens leukocyte-associated Ig-like receptor 2 (LAIR2), transcript variant 2, mRNA                               |
| NM_002288 | Homo sapiens leukocyte-associated Ig-like receptor 2 (LAIR2), transcript variant 1, mRNA                               |
| NM_020983 | Homo sapiens adenylate cyclase 6 (ADCY6), transcript variant 2, mRNA   |
| NM_015270 | Homo sapiens adenylate cyclase 6 (ADCY6), transcript variant 1, mRNA   |
| NM_020987 | Homo sapiens ankyrin 3, node of Ranvier (ankyrin G) (ANK3), transcript variant 1, mRNA                                 |
| NM_020977 | Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA  |
| NM_001148 | Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 1, mRNA  |
| NM_020481 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 8, mRNA  |
| NM_020480 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 7, mRNA  |
| NM_020479 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 6, mRNA  |
| NM_020478 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 5, mRNA  |
| NM_020477 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 2, mRNA  |
| NM_000037 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 3, mRNA  |
| NM_020476 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA  |
| NM_020475 | Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 4, mRNA  |
| NM_021056 | Homo sapiens tuberous sclerosis 2 (TSC2), transcript variant 3, mRNA   |
| NM_021055 | Homo sapiens tuberous sclerosis 2 (TSC2), transcript variant 2, mRNA   |
| NM_000548 | Homo sapiens tuberous sclerosis 2 (TSC2), transcript variant 1, mRNA   |
| NM_004041 | Homo sapiens arrestin, beta 1 (ARRB1), transcript variant 1, mRNA  |
| NM_020251 | Homo sapiens arrestin, beta 1 (ARRB1), transcript variant 2, mRNA  |
| NM_000872 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 7 (adenylate cyclase-coupled) (HTR7), transcript variant a, mRNA |
| NM_019860 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 7 (adenylate cyclase-coupled) (HTR7), transcript variant b, mRNA |
| NM_019859 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 7 (adenylate cyclase-coupled) (HTR7), transcript variant d, mRNA |
| NM_004228 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 2 (cytohesin-2) (PSCD2), transcript variant 2, mRNA     |
| NM_017457 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 2 (cytohesin-2) (PSCD2), transcript variant 1, mRNA     |
| NM_004302 | Homo sapiens activin A receptor, type IB (ACVR1B), transcript variant 1, mRNA  |
| NM_020328 | Homo sapiens activin A receptor, type IB (ACVR1B), transcript variant 3, mRNA  |
| NM_020327 | Homo sapiens activin A receptor, type IB (ACVR1B), transcript variant 2, mRNA  |
| NM_012082 | Homo sapiens Friend of GATA2 (FOG2), mRNA  |
| NM_000578 | Homo sapiens solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1 (SLC11A1), mRNA       |
| NM_021094 | Homo sapiens solute carrier family 21 (organic anion transporter), member 3 (SLC21A3), mRNA                            |
| NM_003739 | Homo sapiens aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid   |

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|           | dehydrogenase, type II) (AKR1C3), mRNA   |
| NM_000735 | Homo sapiens glycoprotein hormones, alpha polypeptide (CGA), mRNA  |
| NM_014272 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 7 (ADAMTS7), mRNA |
| NM_019863 | Homo sapiens coagulation factor VIII, procoagulant component (hemophilia A) (F8), transcript variant 2, mRNA             |
| NM_000132 | Homo sapiens coagulation factor VIII, procoagulant component (hemophilia A) (F8), transcript variant 1, mRNA             |
| NM_019616 | Homo sapiens coagulation factor VII (serum prothrombin conversion accelerator) (F7), transcript variant 2, mRNA          |
| NM_000131 | Homo sapiens coagulation factor VII (serum prothrombin conversion accelerator) (F7), transcript variant 1, mRNA          |
| NM_007219 | Homo sapiens ring finger protein 24 (RNF24), mRNA  |
| NM_021010 | Homo sapiens defensin, alpha 5, Paneth cell-specific (DEFA5), mRNA   |
| NM_016250 | Homo sapiens N-myc downstream-regulated gene 2 (NDRG2), mRNA   |
| NM_020525 | Homo sapiens interleukin 22 (IL22), mRNA   |
| NM_006774 | Homo sapiens indolethylamine N-methyltransferase (INMT), mRNA  |
| NM_014310 | Homo sapiens similar to mouse Ras, dexamethasone-induced 1 (RASD1), mRNA   |
| NM_020322 | Homo sapiens amiloride-sensitive cation channel 3, testis (ACCN3), transcript variant 3, mRNA                            |
| NM_020321 | Homo sapiens amiloride-sensitive cation channel 3, testis (ACCN3), transcript variant 2, mRNA                            |
| NM_020334 | Homo sapiens a disintegrin and metalloproteinase domain 30 (ADAM30), transcript variant 2, mRNA                          |
| NM_019559 | Homo sapiens coagulation factor XI (plasma thromboplastin antecedent) (F11), transcript variant 2, mRNA                  |
| NM_000128 | Homo sapiens coagulation factor XI (plasma thromboplastin antecedent) (F11), transcript variant 1, mRNA                  |
| NM_000443 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant A, mRNA                  |
| NM_018850 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant C, mRNA                  |
| NM_018849 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA                  |
| NM_020038 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3B, mRNA             |
| NM_020037 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3A, mRNA             |
| NM_003786 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3, mRNA              |
| NM_019624 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 9 (ABCB9), transcript variant 2, mRNA                  |
| NM_019625 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 9 (ABCB9), transcript variant 1, mRNA                  |
| NM_004996 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 1, mRNA                 |
| NM_019902 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 7, mRNA                 |
| NM_019901 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 6, mRNA                 |
| NM_019900 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1   |

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|           | (ABCC1), transcript variant 5, mRNA  |
| NM_019899 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 4, mRNA   |
| NM_019898 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 3, mRNA   |
| NM_019862 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 1 (ABCC1), transcript variant 2, mRNA   |
| NM_019903 | Homo sapiens adducin 3 (gamma) (ADD3), transcript variant 2, mRNA  |
| NM_001640 | Homo sapiens N-acylaminoacyl-peptide hydrolase (APEH), mRNA  |
| NM_019858 | Homo sapiens protein A (A), transcript variant A-2, mRNA   |
| NM_000407 | Homo sapiens glycoprotein Ib (platelet), beta polypeptide (GPIBB), mRNA  |
| NM_015675 | Homo sapiens growth arrest and DNA-damage-inducible, beta (GADD45B), mRNA  |
| NM_016824 | Homo sapiens adducin 3 (gamma) (ADD3), transcript variant 1, mRNA  |
| NM_020039 | Homo sapiens amiloride-sensitive cation channel 2, neuronal (ACCN2), transcript variant 1, mRNA  |
| NM_005388 | Homo sapiens phosducin-like (PDCL), mRNA   |
| NM_017585 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 6 (SLC2A6), mRNA  |
| NM_020238 | Homo sapiens inner centromere protein antigens (135kD, 155kD) (INCENP), mRNA   |
| NM_006908 | Homo sapiens ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1) (RAC1), transcript variant Rac1, mRNA                   |
| NM_018890 | Homo sapiens ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1) (RAC1), transcript variant Rac1b, mRNA                  |
| NM_018891 | Homo sapiens laminin, gamma 2 (nicein (100kD), kalinin (105kD), BM600 (100kD), Herlitz junctional epidermolysis bullosa) (LAMC2), transcript variant 2, mRNA |
| NM_013430 | Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA  |
| NM_013421 | Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 2, mRNA  |
| NM_004954 | Homo sapiens ELKL motif kinase (EMK1), transcript variant 2, mRNA  |
| NM_017490 | Homo sapiens ELKL motif kinase (EMK1), transcript variant 1, mRNA  |
| NM_004105 | Homo sapiens EGF-containing fibulin-like extracellular matrix protein 1 (EFEMP1), transcript variant 1, mRNA   |
| NM_002403 | Homo sapiens microfibrillar-associated protein 2 (MFAP2), transcript variant 2, mRNA   |
| NM_017459 | Homo sapiens microfibrillar-associated protein 2 (MFAP2), transcript variant 1, mRNA   |
| NM_005115 | Homo sapiens major vault protein (MVP), transcript variant 2, mRNA   |
| NM_017458 | Homo sapiens major vault protein (MVP), transcript variant 1, mRNA   |
| NM_018894 | Homo sapiens EGF-containing fibulin-like extracellular matrix protein 1 (EFEMP1), transcript variant 2, mRNA   |
| NM_016519 | Homo sapiens ameloblastin, enamel matrix protein (AMBN), mRNA  |
| NM_017492 | Homo sapiens ataxin 2 related protein (A2LP), transcript variant 2, mRNA   |
| NM_007193 | Homo sapiens annexin A10 (ANXA10), mRNA  |
| NM_019102 | Homo sapiens homeo box A5 (HOXA5), mRNA  |
| NM_018971 | Homo sapiens G protein-coupled receptor 27 (GPR27), mRNA   |
| NM_003379 | Homo sapiens villin 2 (ezrin) (VIL2), mRNA   |
| NM_016830 | Homo sapiens vesicle-associated membrane protein 1 (synaptobrevin 1) (VAMP1), transcript variant VAMP-1B, mRNA   |

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| NM_014231 | Homo sapiens vesicle-associated membrane protein 1 (synaptobrevin 1) (VAMP1), transcript variant VAMP-1A, mRNA             |
| NM_017489 | Homo sapiens telomeric repeat binding factor (NIMA-interacting) 1 (TERF1), transcript variant 1, mRNA                      |
| NM_003218 | Homo sapiens telomeric repeat binding factor (NIMA-interacting) 1 (TERF1), transcript variant 2, mRNA                      |
| NM_017455 | Homo sapiens stromal cell derived factor receptor 1 (SDFR1), transcript variant alpha, mRNA                                |
| NM_007098 | Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 2, mRNA                                       |
| NM_017451 | Homo sapiens BAI1-associated protein 2 (BAIAP2), transcript variant 2, mRNA  |
| NM_017450 | Homo sapiens BAI1-associated protein 2 (BAIAP2), transcript variant 1, mRNA  |
| NM_001617 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-1, mRNA  |
| NM_017488 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-4, mRNA  |
| NM_017487 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-6b, mRNA   |
| NM_017486 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-6a, mRNA   |
| NM_017485 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-5a, mRNA   |
| NM_017484 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-3b, mRNA   |
| NM_017483 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-3a, mRNA   |
| NM_017482 | Homo sapiens adducin 2 (beta) (ADD2), transcript variant beta-2, mRNA  |
| NM_018561 | Homo sapiens DKFZP586D2223 protein (DKFZP586D2223), mRNA   |
| NM_018413 | Homo sapiens chondroitin 4-sulfotransferase (C4ST), mRNA   |
| NM_017835 | Homo sapiens chromosome 21 open reading frame 59 (C21ORF59), mRNA  |
| NM_018226 | Homo sapiens arginyl aminopeptidase (aminopeptidase B)-like 1 (RNPEPL1), mRNA  |
| NM_018204 | Homo sapiens cytoskeleton associated protein 2 (CKAP2), mRNA   |
| NM_018200 | Homo sapiens high-mobility group 20A (HMG20A), mRNA  |
| NM_017595 | Homo sapiens I-kappa-B-interacting Ras-like protein 2 (KBRAS2), mRNA   |
| NM_017613 | Homo sapiens downstream neighbor of SON (DONSON), mRNA   |
| NM_017596 | Homo sapiens KIAA0449 protein (KIAA0449), mRNA   |
| NM_017456 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1), transcript variant 2, mRNA         |
| NM_016829 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 2e, mRNA |
| NM_016828 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 2d, mRNA |
| NM_016827 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 2c, mRNA |
| NM_016826 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 2b, mRNA |
| NM_016821 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 2a, mRNA |
| NM_016820 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 1c, mRNA |
| NM_016819 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 1b, mRNA |
| NM_002197 | Homo sapiens aconitase 1, soluble (ACO1), mRNA   |
| NM_016841 | Homo sapiens microtubule-associated protein tau (MAPT), transcript variant 4, mRNA   |
| NM_016835 | Homo sapiens microtubule-associated protein tau (MAPT), transcript variant 1, mRNA   |
| NM_016834 | Homo sapiens microtubule-associated protein tau (MAPT), transcript variant 3, mRNA   |

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|           | mRNA   |
| NM_016938 | Homo sapiens EGF-containing fibulin-like extracellular matrix protein 2 (EFEMP2), mRNA                                     |
| NM_005569 | Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA  |
| NM_016733 | Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2b, mRNA  |
| NM_002314 | Homo sapiens LIM domain kinase 1 (LIMK1), transcript variant 1, mRNA   |
| NM_016735 | Homo sapiens LIM domain kinase 1 (LIMK1), transcript variant dLIMK, mRNA   |
| NM_006855 | Homo sapiens KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3 (KDEL3), transcript variant 1, mRNA |
| NM_016657 | Homo sapiens KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3 (KDEL3), transcript variant 2, mRNA |
| NM_002101 | Homo sapiens glycophorin C (Gerbich blood group) (GYPC), transcript variant 1, mRNA  |
| NM_016815 | Homo sapiens glycophorin C (Gerbich blood group) (GYPC), transcript variant 2, mRNA  |
| NM_005242 | Homo sapiens coagulation factor II (thrombin) receptor-like 1 (F2RL1), mRNA  |
| NM_016818 | Homo sapiens ATP-binding cassette, sub-family G (WHITE), member 1 (ABCG1), transcript variant 2, mRNA                      |
| NM_004915 | Homo sapiens ATP-binding cassette, sub-family G (WHITE), member 1 (ABCG1), transcript variant 1, mRNA                      |
| NM_002542 | Homo sapiens 8-oxoguanine DNA glycosylase (OGG1), nuclear gene encoding mitochondrial protein, transcript variant 1a, mRNA |
| NM_000665 | Homo sapiens acetylcholinesterase (YT blood group) (ACHE), transcript variant E4-E6, mRNA                                  |
| NM_013999 | Homo sapiens mesenchyme homeo box 1 (MEOX1), transcript variant 2, mRNA  |
| NM_003927 | Homo sapiens methyl-CpG binding domain protein 2 (MBD2), transcript variant 1, mRNA  |
| NM_015832 | Homo sapiens methyl-CpG binding domain protein 2 (MBD2), transcript variant testis-specific, mRNA                          |
| NM_002384 | Homo sapiens methyl-CpG binding domain protein 1 (MBD1), transcript variant 4, mRNA  |
| NM_015847 | Homo sapiens methyl-CpG binding domain protein 1 (MBD1), transcript variant PCM1, mRNA                                     |
| NM_015846 | Homo sapiens methyl-CpG binding domain protein 1 (MBD1), transcript variant 1, mRNA  |
| NM_015845 | Homo sapiens methyl-CpG binding domain protein 1 (MBD1), transcript variant 2, mRNA  |
| NM_015844 | Homo sapiens methyl-CpG binding domain protein 1 (MBD1), transcript variant 3, mRNA  |
| NM_002311 | Homo sapiens ligase III, DNA, ATP-dependent (LIG3), transcript variant beta, mRNA  |
| NM_013975 | Homo sapiens ligase III, DNA, ATP-dependent (LIG3), transcript variant alpha, mRNA   |
| NM_014190 | Homo sapiens adducin 1 (alpha) (ADD1), transcript variant 3, mRNA  |
| NM_014189 | Homo sapiens adducin 1 (alpha) (ADD1), transcript variant 2, mRNA  |
| NM_001119 | Homo sapiens adducin 1 (alpha) (ADD1), transcript variant 1, mRNA  |
| NM_015831 | Homo sapiens acetylcholinesterase (YT blood group) (ACHE), transcript variant E4-E5, mRNA                                  |
| NM_016572 | Homo sapiens ubiquitin specific protease 21 (USP21), mRNA  |
| NM_016388 | Homo sapiens T-cell receptor interacting molecule (TRIM), mRNA   |
| NM_016272 | Homo sapiens transducer of ERBB2, 2 (TOB2), mRNA   |
| NM_016135 | Homo sapiens transcription factor ets (TEL2), mRNA   |

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| NM_016247 | Homo sapiens interphotoreceptor matrix proteoglycan 200 (SPACRCAN), mRNA                                     |
| NM_016334 | Homo sapiens putative G-protein coupled receptor (SH120), mRNA   |
| NM_016124 | Homo sapiens Rhesus blood group, D antigen (RHD), mRNA   |
| NM_015865 | Homo sapiens solute carrier family 14 (urea transporter), member 1 (Kidd blood group) (SLC14A1), mRNA        |
| NM_016112 | Homo sapiens polycystic kidney disease 2-like 1 (PKD2L1), mRNA   |
| NM_016318 | Homo sapiens purinergic receptor P2X, ligand-gated ion channel, 2 (P2RX2), mRNA                              |
| NM_016653 | Homo sapiens sterile-alpha motif and leucine zipper containing kinase AZK (ZAK), mRNA                        |
| NM_016556 | Homo sapiens GT198, complete ORF (HUMGT198A), mRNA   |
| NM_016431 | Homo sapiens mitogen-activated protein kinase 8 interacting protein 2 (MAPK8IP2), mRNA                       |
| NM_016377 | Homo sapiens A kinase (PRKA) anchor protein 7 (AKAP7), mRNA  |
| NM_016346 | Homo sapiens nuclear receptor subfamily 2, group E, member 3 (NR2E3), mRNA                                   |
| NM_016325 | Homo sapiens zinc finger protein 274 (ZNF274), mRNA  |
| NM_016324 | Homo sapiens zinc finger protein 274 (ZNF274), mRNA  |
| NM_016293 | Homo sapiens bridging integrator 2 (BIN2), mRNA  |
| NM_015909 | Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA  |
| NM_015890 | Homo sapiens spondyloepiphyseal dysplasia, late, pseudogene (SEDLP), mRNA                                    |
| NM_015885 | Homo sapiens PCF11p homolog (PCF11), mRNA  |
| NM_015991 | Homo sapiens complement component 1, q subcomponent, alpha polypeptide (C1QA), mRNA                          |
| NM_016201 | Homo sapiens Leman coiled-coil protein (LCCP), mRNA  |
| NM_016157 | Homo sapiens trophinin (TRO), mRNA   |
| NM_015869 | Homo sapiens peroxisome proliferative activated receptor, gamma (PPARG), mRNA                                |
| NM_016615 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, GABA), member 13 (SLC6A13), mRNA         |
| NM_016389 | Homo sapiens NS1-binding protein (NS1-BP), mRNA  |
| NM_016648 | Homo sapiens HDCMA18P protein (HDCMA18P), mRNA   |
| NM_016527 | Homo sapiens hydroxyacid oxidase 2 (long chain) (HAO2), mRNA   |
| NM_016263 | Homo sapiens Fzr1 protein (FZR1), mRNA   |
| NM_016602 | Homo sapiens G protein-coupled receptor 2 (GPR2), mRNA   |
| NM_015892 | Homo sapiens B cell RAG associated protein (BRAG), mRNA  |
| NM_016187 | Homo sapiens bridging integrator 2 (BIN2), mRNA  |
| NM_003373 | Homo sapiens vinculin (VCL), transcript variant VCL, mRNA  |
| NM_014000 | Homo sapiens vinculin (VCL), transcript variant meta-VCL, mRNA   |
| NM_013992 | Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8E, mRNA  |
| NM_013988 | Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA |
| NM_013987 | Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 2, mRNA |
| NM_013985 | Homo sapiens neuregulin 2 (NRG2), transcript variant 6, mRNA   |
| NM_013984 | Homo sapiens neuregulin 2 (NRG2), transcript variant 5, mRNA   |
| NM_013983 | Homo sapiens neuregulin 2 (NRG2), transcript variant 4, mRNA   |
| NM_013982 | Homo sapiens neuregulin 2 (NRG2), transcript variant 3, mRNA   |
| NM_013981 | Homo sapiens neuregulin 2 (NRG2), transcript variant 2, mRNA   |
| NM_013964 | Homo sapiens neuregulin 1 (NRG1), transcript variant HRG-alpha, mRNA   |
| NM_013962 | Homo sapiens neuregulin 1 (NRG1), transcript variant GGF2, mRNA  |

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| NM_013961 | Homo sapiens neuregulin 1 (NRG1), transcript variant GGF, mRNA   |
| NM_013960 | Homo sapiens neuregulin 1 (NRG1), transcript variant ndf43, mRNA   |
| NM_013959 | Homo sapiens neuregulin 1 (NRG1), transcript variant SMDF, mRNA  |
| NM_013958 | Homo sapiens neuregulin 1 (NRG1), transcript variant HRG-beta3, mRNA   |
| NM_013957 | Homo sapiens neuregulin 1 (NRG1), transcript variant HRG-beta2, mRNA   |
| NM_013956 | Homo sapiens neuregulin 1 (NRG1), transcript variant HRG-beta1, mRNA   |
| NM_013955 | Homo sapiens NADPH oxidase 1 (NOX1), transcript variant NOH-1Lv, mRNA  |
| NM_013954 | Homo sapiens NADPH oxidase 1 (NOX1), transcript variant NOH-1S, mRNA   |
| NM_013995 | Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), transcript variant LAMP2B, mRNA  |
| NM_007334 | Homo sapiens killer cell lectin-like receptor subfamily D, member 1 (KLRD1), transcript variant 2, mRNA  |
| NM_002262 | Homo sapiens killer cell lectin-like receptor subfamily D, member 1 (KLRD1), transcript variant 1, mRNA  |
| NM_013976 | Homo sapiens glutaryl-Coenzyme A dehydrogenase (GCDH), nuclear gene encoding mitochondrial protein, transcript variant 2, mRNA                 |
| NM_015841 | Homo sapiens adenosine deaminase, RNA-specific (ADAR), transcript variant ADAR-c, mRNA   |
| NM_015840 | Homo sapiens adenosine deaminase, RNA-specific (ADAR), transcript variant ADAR-b, mRNA   |
| NM_001111 | Homo sapiens adenosine deaminase, RNA-specific (ADAR), transcript variant ADAR-a, mRNA   |
| NM_014925 | Homo sapiens KIAA1002 protein (KIAA1002), mRNA   |
| NM_014905 | Homo sapiens glutaminase (GLS), mRNA   |
| NM_014833 | Homo sapiens KIAA0618 gene product (KIAA0618), mRNA  |
| NM_014863 | Homo sapiens B cell RAG associated protein (BRAG), mRNA  |
| NM_015646 | Homo sapiens RAP1B, member of RAS oncogene family (RAP1B), mRNA  |
| NM_015423 | Homo sapiens aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase (AASDHPPT), mRNA  |
| NM_015523 | Homo sapiens small fragment nuclease (DKFZP566E144), mRNA  |
| NM_014397 | Homo sapiens NIMA (never in mitosis gene a)-related kinase 6 (NEK6), mRNA  |
| NM_014249 | Homo sapiens nuclear receptor subfamily 2, group E, member 3 (NR2E3), mRNA   |
| NM_014361 | Homo sapiens contactin 5 (CNTN5), mRNA   |
| NM_014341 | Homo sapiens mitochondrial carrier homolog 1 (MTCH1), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_014556 | Homo sapiens Ellis van Creveld syndrome (EVC), mRNA  |
| NM_014306 | Homo sapiens hypothetical protein (HSPC117), mRNA  |
| NM_014593 | Homo sapiens CpG binding protein (CGBP), mRNA  |
| NM_014567 | Homo sapiens breast cancer anti-estrogen resistance 1 (BCAR1), mRNA  |
| NM_014273 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 6 (ADAMTS6), mRNA                       |
| NM_014244 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 2 (ADAMTS2), transcript variant 1, mRNA |
| NM_014449 | Homo sapiens protein A (A), transcript variant A-1, mRNA   |
| NM_007319 | Homo sapiens presenilin 1 (Alzheimer disease 3) (PSEN1), transcript variant I-374., mRNA   |
| NM_007318 | Homo sapiens presenilin 1 (Alzheimer disease 3) (PSEN1), transcript variant I-463, mRNA  |
| NM_013953 | Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8D, mRNA  |
| NM_013952 | Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8C, mRNA  |
| NM_013951 | Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8B, mRNA  |



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| NM_013945 | Homo sapiens paired box gene 7 (PAX7), transcript variant 2, mRNA   |
| NM_013942 | Homo sapiens paired box gene 3 (Waardenburg syndrome 1) (PAX3), transcript variant PAX3B, mRNA                    |
| NM_013411 | Homo sapiens adenylate kinase 2 (AK2), nuclear gene encoding mitochondrial protein, transcript variant AK2B, mRNA |
| NM_000631 | Homo sapiens neutrophil cytosolic factor 4 (40kD) (NCF4), transcript variant 1, mRNA                              |
| NM_013416 | Homo sapiens neutrophil cytosolic factor 4 (40kD) (NCF4), transcript variant 2, mRNA                              |
| NM_006125 | Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 3, mRNA                                |
| NM_013427 | Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 1, mRNA                                |
| NM_013423 | Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA                                |
| NM_013422 | Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 5, mRNA                                |
| NM_001174 | Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 2, mRNA                                |
| NM_013436 | Homo sapiens NCK-associated protein 1 (NCKAP1), mRNA  |
| NM_012310 | Homo sapiens kinesin family member 4A (KIF4A), mRNA   |
| NM_013449 | Homo sapiens bromodomain adjacent to zinc finger domain, 2A (BAZ2A), mRNA   |
| NM_007333 | Homo sapiens killer cell lectin-like receptor subfamily C, member 3 (KLRC3), transcript variant NKG2-H, mRNA      |
| NM_007328 | Homo sapiens killer cell lectin-like receptor subfamily C, member 1 (KLRC1), transcript variant NKG2-B, mRNA      |
| NM_002259 | Homo sapiens killer cell lectin-like receptor subfamily C, member 1 (KLRC1), transcript variant NKG2-A, mRNA      |
| NM_004214 | Homo sapiens fibroblast growth factor (acidic) intracellular binding protein (FIBP), mRNA                         |
| NM_006350 | Homo sapiens follistatin (FST), transcript variant FST317, mRNA   |
| NM_013409 | Homo sapiens follistatin (FST), transcript variant FST344, mRNA   |
| NM_013324 | Homo sapiens cytokine inducible SH2-containing protein (CISH), mRNA   |
| NM_012486 | Homo sapiens presenilin 2 (Alzheimer disease 4) (PSEN2), transcript variant 2, mRNA                               |
| NM_012485 | Homo sapiens hyaluronan-mediated motility receptor (RHAMM) (HMMR), transcript variant 2, mRNA                     |
| NM_012484 | Homo sapiens hyaluronan-mediated motility receptor (RHAMM) (HMMR), transcript variant 1, mRNA                     |
| NM_012483 | Homo sapiens granulysin (GNLY), transcript variant 519, mRNA  |
| NM_006433 | Homo sapiens granulysin (GNLY), transcript variant NKG5, mRNA   |
| NM_001930 | Homo sapiens deoxyhypusine synthase (DHPS), transcript variant 1, mRNA  |
| NM_013407 | Homo sapiens deoxyhypusine synthase (DHPS), transcript variant 3, mRNA  |
| NM_013406 | Homo sapiens deoxyhypusine synthase (DHPS), transcript variant 2, mRNA  |
| NM_013229 | Homo sapiens apoptotic protease activating factor (APAF1), transcript variant 1, mRNA                             |
| NM_013251 | Homo sapiens tachykinin 3 (neuromedin K, neurokinin beta) (TAC3), mRNA  |
| NM_013396 | Homo sapiens ubiquitin specific protease 25 (USP25), mRNA   |
| NM_013255 | Homo sapiens muskellin 1, intracellular mediator containing kelch motifs (MKLN1), mRNA                            |
| NM_013290 | Homo sapiens GT198, complete ORF (HUMGT198A), mRNA  |

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| NM_005102 | Homo sapiens fasciculation and elongation protein zeta 2 (zygin II) (FEZ2), mRNA   |
| NM_004830 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 3 (130kD) (CRSP3), mRNA   |
| NM_009588 | Homo sapiens lymphotoxin beta (TNF superfamily, member 3) (LTB), transcript variant 2, mRNA  |
| NM_013227 | Homo sapiens aggrecan 1 (chondroitin sulfate proteoglycan 1, large aggregating proteoglycan, antigen identified by monoclonal antibody A0122) (AGC1), transcript variant 2, mRNA |
| NM_012475 | Homo sapiens ubiquitin specific protease 21 (USP21), mRNA  |
| NM_012428 | Homo sapiens stromal cell derived factor receptor 1 (SDFR1), transcript variant beta, mRNA   |
| NM_012226 | Homo sapiens purinergic receptor P2X, ligand-gated ion channel, 2 (P2RX2), mRNA  |
| NM_012369 | Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA   |
| NM_012218 | Homo sapiens interleukin enhancer binding factor 3, 90kD (ILF3), mRNA  |
| NM_012324 | Homo sapiens mitogen-activated protein kinase 8 interacting protein 2 (MAPK8IP2), mRNA   |
| NM_012405 | Homo sapiens isoprenylcysteine carboxyl methyltransferase (ICMT), mRNA   |
| NM_012070 | Homo sapiens attractin (ATRN), mRNA  |
| NM_006874 | Homo sapiens E74-like factor 2 (ets domain transcription factor) (ELF2), mRNA  |
| NM_007308 | Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), transcript variant NACP112, mRNA   |
| NM_000345 | Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), transcript variant NACP140, mRNA   |
| NM_009589 | Homo sapiens arylsulfatase D (ARSD), transcript variant 2, mRNA  |
| NM_001158 | Homo sapiens amine oxidase, copper containing 2 (retina-specific) (AOC2), transcript variant 1, mRNA   |
| NM_005910 | Homo sapiens microtubule-associated protein tau (MAPT), transcript variant 2, mRNA   |
| NM_007338 | Homo sapiens deleted in lung and esophageal cancer 1 (DLEC1), transcript variant DLEC1-L1, mRNA  |
| NM_007337 | Homo sapiens deleted in lung and esophageal cancer 1 (DLEC1), transcript variant DLEC1-S3, mRNA  |
| NM_007336 | Homo sapiens deleted in lung and esophageal cancer 1 (DLEC1), transcript variant DLEC1-S2, mRNA  |
| NM_007335 | Homo sapiens deleted in lung and esophageal cancer 1 (DLEC1), transcript variant DLEC1-S1, mRNA  |
| NM_005106 | Homo sapiens deleted in lung and esophageal cancer 1 (DLEC1), transcript variant DLEC1-N1, mRNA  |
| NM_005002 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9 (39kD) (NDUFA9), mRNA   |
| NM_003771 | Homo sapiens keratin, hair, acidic, 6 (KRTHA6), mRNA   |
| NM_000438 | Homo sapiens paired box gene 3 (Waardenburg syndrome 1) (PAX3), transcript variant PAX3A, mRNA   |
| NM_007052 | Homo sapiens NADPH oxidase 1 (NOX1), transcript variant NOH-1L, mRNA   |
| NM_006715 | Homo sapiens mannosidase, alpha, class 2C, member 1 (MAN2C1), mRNA   |
| NM_007325 | Homo sapiens glutamate receptor, ionotropic, AMPA 3 (GRIA3), transcript variant flip, mRNA   |
| NM_005813 | Homo sapiens protein kinase C, nu (PRKCN), mRNA  |
| NM_000398 | Homo sapiens diaphorase (NADH) (cytochrome b-5 reductase) (DIA1), nuclear  |

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|           | gene encoding mitochondrial protein, transcript variant M, mRNA   |
| NM_007306 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA   |
| NM_007305 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta9-10-11b, mRNA                                       |
| NM_007304 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta11b, mRNA  |
| NM_007303 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta11, mRNA   |
| NM_007302 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta9-10, mRNA   |
| NM_007301 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta15-17, mRNA  |
| NM_007300 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta14-18, mRNA  |
| NM_007299 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta14-17, mRNA  |
| NM_007298 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta9-11, mRNA   |
| NM_007297 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta2-10, mRNA   |
| NM_007296 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1a', mRNA   |
| NM_007295 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1b, mRNA  |
| NM_007294 | Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1a, mRNA  |
| NM_007322 | Homo sapiens RAN binding protein 3 (RANBP3), transcript variant RANBP3-d, mRNA  |
| NM_007321 | Homo sapiens RAN binding protein 3 (RANBP3), transcript variant RANBP3-c, mRNA  |
| NM_007320 | Homo sapiens RAN binding protein 3 (RANBP3), transcript variant RANBP3-b, mRNA  |
| NM_000754 | Homo sapiens catechol-O-methyltransferase (COMT), transcript variant MB-COMT, mRNA  |
| NM_007310 | Homo sapiens catechol-O-methyltransferase (COMT), transcript variant S-COMT, mRNA   |
| NM_000714 | Homo sapiens benzodiazapine receptor (peripheral) (BZRP), nuclear gene encoding mitochondrial protein, transcript variant PBR, mRNA   |
| NM_007311 | Homo sapiens benzodiazapine receptor (peripheral) (BZRP), nuclear gene encoding mitochondrial protein, transcript variant PBR-S, mRNA |
| NM_007314 | Homo sapiens v-abl Abelson murine leukemia viral oncogene homolog 2 (arg, Abelson-related gene) (ABL2), transcript variant b, mRNA    |
| NM_007313 | Homo sapiens v-abl Abelson murine leukemia viral oncogene homolog 1 (ABL1), transcript variant b, mRNA                                |
| NM_005157 | Homo sapiens v-abl Abelson murine leukemia viral oncogene homolog 1 (ABL1), transcript variant a, mRNA                                |
| NM_006325 | Homo sapiens RAN, member RAS oncogene family (RAN), mRNA  |
| NM_000902 | Homo sapiens membrane metallo-endopeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME), transcript variant 1, mRNA     |
| NM_007289 | Homo sapiens membrane metallo-endopeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME), transcript variant 2b, mRNA    |

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| NM_007288 | Homo sapiens membrane metallo-endorpeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME), transcript variant 2a, mRNA  |
| NM_007287 | Homo sapiens membrane metallo-endorpeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME), transcript variant 1bis, mRNA  |
| NM_006481 | Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), transcript variant b, mRNA   |
| NM_006884 | Homo sapiens short stature homeobox 2 (SHOX2), transcript variant SHOX2a, mRNA   |
| NM_003030 | Homo sapiens short stature homeobox 2 (SHOX2), transcript variant SHOX2b, mRNA   |
| NM_003005 | Homo sapiens selectin P (granule membrane protein 140kD, antigen CD62) (SELP), mRNA  |
| NM_006718 | Homo sapiens pleiomorphic adenoma gene-like 1 (PLAGL1), transcript variant 2, mRNA   |
| NM_005888 | Homo sapiens solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3 (SLC25A3), nuclear gene encoding mitochondrial protein, transcript variant 1a, mRNA |
| NM_006491 | Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), transcript variant 3, mRNA   |
| NM_006489 | Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), transcript variant 2, mRNA   |
| NM_007088 | Homo sapiens calbindin 2, (29kD, calretinin) (CALB2), transcript variant CALB2c, mRNA  |
| NM_007087 | Homo sapiens calbindin 2, (29kD, calretinin) (CALB2), transcript variant CALB2b, mRNA  |
| NM_001740 | Homo sapiens calbindin 2, (29kD, calretinin) (CALB2), transcript variant CALB2, mRNA   |
| NM_007292 | Homo sapiens acyl-Coenzyme A oxidase 1, palmitoyl (ACOX1), transcript variant 2, mRNA  |
| NM_004035 | Homo sapiens acyl-Coenzyme A oxidase 1, palmitoyl (ACOX1), transcript variant 1, mRNA  |
| NM_000632 | Homo sapiens integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide) (ITGAM), mRNA                        |
| NM_007097 | Homo sapiens clathrin, light polypeptide (Lcb) (CLTB), mRNA  |
| NM_007099 | Homo sapiens acid phosphatase 1, soluble (ACP1), transcript variant b, mRNA  |
| NM_007177 | Homo sapiens TU3A protein (TU3A), mRNA   |
| NM_007245 | Homo sapiens ataxin 2 related protein (A2LP), transcript variant 1, mRNA   |
| NM_006487 | Homo sapiens fibulin 1 (FBLN1), transcript variant A, mRNA   |
| NM_006486 | Homo sapiens fibulin 1 (FBLN1), transcript variant D, mRNA   |
| NM_006485 | Homo sapiens fibulin 1 (FBLN1), transcript variant B, mRNA   |
| NM_006721 | Homo sapiens adenosine kinase (ADK), transcript variant ADK-long, mRNA   |
| NM_006132 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-4, mRNA  |
| NM_006131 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-5, mRNA  |
| NM_006130 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-6, mRNA  |
| NM_006129 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-3, mRNA  |
| NM_006128 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-2, mRNA  |

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| NM_002516 | Homo sapiens neuro-oncological ventral antigen 2 (NOVA2), mRNA   |
| NM_007008 | Homo sapiens reticulon 4 (RTN4), mRNA  |
| NM_007046 | Homo sapiens elastin microfibril interface located protein (EMILIN), mRNA  |
| NM_007037 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 8 (ADAMTS8), mRNA                           |
| NM_007038 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 5 (aggrecanase-2) (ADAMTS5), mRNA           |
| NM_006799 | Homo sapiens protease, serine, 21 (testisin) (PRSS21), mRNA  |
| NM_006814 | Homo sapiens proteasome (prosome, macropain) inhibitor subunit 1 (PI31) (PSMF1), mRNA  |
| NM_003466 | Homo sapiens paired box gene 8 (PAX8), transcript variant PAX8A, mRNA  |
| NM_006790 | Homo sapiens titin immunoglobulin domain protein (myotilin) (TTID), mRNA   |
| NM_006782 | Homo sapiens zinc finger protein-like 1 (ZFPL1), mRNA  |
| NM_006795 | Homo sapiens EH domain containing 1 (EHD1), mRNA   |
| NM_006588 | Homo sapiens sulfotransferase family, cytosolic, 1C, member 2 (SULT1C2), mRNA  |
| NM_006694 | Homo sapiens jumping translocation breakpoint (JTB), mRNA  |
| NM_006597 | Homo sapiens heat shock 70kD protein 8 (HSPA8), mRNA   |
| NM_006708 | Homo sapiens glyoxalase I (GLO1), mRNA   |
| NM_006703 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 3 (NUDT3), mRNA   |
| NM_000655 | Homo sapiens selectin L (lymphocyte adhesion molecule 1) (SELL), mRNA  |
| NM_006488 | Homo sapiens ketohexokinase (fructokinase) (KHK), transcript variant b, mRNA   |
| NM_006297 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 1 (XRCC1), mRNA  |
| NM_006339 | Homo sapiens high-mobility group 20B (HMG20B), mRNA  |
| NM_006469 | Homo sapiens NS1-binding protein (NS1-BP), mRNA  |
| NM_006340 | Homo sapiens BAI1-associated protein 2 (BAIAP2), transcript variant 3, mRNA  |
| NM_001353 | Homo sapiens aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase) (AKR1C1), mRNA |
| NM_000202 | Homo sapiens iduronate 2-sulfatase (Hunter syndrome) (IDS), transcript variant 1, mRNA   |
| NM_005890 | Homo sapiens growth arrest-specific 7 (GAS7), transcript variant b, mRNA   |
| NM_006123 | Homo sapiens iduronate 2-sulfatase (Hunter syndrome) (IDS), transcript variant 2, mRNA   |
| NM_006053 | Homo sapiens T-cell, immune regulator 1 (TCIRG1), mRNA   |
| NM_005990 | Homo sapiens serine/threonine kinase 10 (STK10), mRNA  |
| NM_006019 | Homo sapiens T-cell, immune regulator 1 (TCIRG1), mRNA   |
| NM_006041 | Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1 (HS3ST3B1), mRNA   |
| NM_006042 | Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 3A1 (HS3ST3A1), mRNA   |
| NM_006043 | Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 2 (HS3ST2), mRNA   |
| NM_000557 | Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA  |
| NM_005847 | Homo sapiens solute carrier family 23 (nucleobase transporters), member 2 (SLC23A2), mRNA  |
| NM_005751 | Homo sapiens A kinase (PRKA) anchor protein (yotiao) 9 (AKAP9), mRNA   |
| NM_005691 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 9 (ABCC9), transcript variant SUR2A, mRNA                                       |

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| NM_005688 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 5 (ABCC5), mRNA   |
| NM_005730 | Homo sapiens conserved gene amplified in osteosarcoma (OS4), mRNA  |
| NM_005562 | Homo sapiens laminin, gamma 2 (nicein (100kD), kalinin (105kD), BM600 (100kD), Herlitz junctional epidermolysis bullosa) (LAMC2), transcript variant 1, mRNA |
| NM_005534 | Homo sapiens interferon gamma receptor 2 (interferon gamma transducer 1) (IFNGR2), mRNA  |
| NM_005682 | Homo sapiens G protein-coupled receptor 56 (GPR56), mRNA   |
| NM_005666 | Homo sapiens H factor (complement)-like 3 (HFL3), mRNA   |
| NM_005503 | Homo sapiens amyloid beta (A4) precursor protein-binding, family A, member 2 (X11-like) (APBA2), mRNA  |
| NM_005431 | Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 2 (XRCC2), mRNA  |
| NM_005465 | Homo sapiens v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma) (AKT3), mRNA  |
| NM_005446 | Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA  |
| NM_005336 | Homo sapiens high density lipoprotein binding protein (vigilin) (HDLBP), mRNA  |
| NM_005265 | Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 1, mRNA  |
| NM_005243 | Homo sapiens Ewing sarcoma breakpoint region 1 (EWSR1), transcript variant EWS, mRNA   |
| NM_005236 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 4 (ERCC4), mRNA   |
| NM_005075 | Homo sapiens solute carrier family 21 (organic anion transporter), member 3 (SLC21A3), mRNA  |
| NM_005050 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 4 (ABCD4), transcript variant 1, mRNA  |
| NM_005006 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1), mRNA  |
| NM_005135 | Homo sapiens solute carrier family 12 (potassium/chloride transporters), member 6 (SLC12A6), mRNA  |
| NM_004968 | Homo sapiens islet cell autoantigen 1 (69kD) (ICA1), transcript variant 2, mRNA  |
| NM_005114 | Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (HS3ST1), mRNA   |
| NM_004958 | Homo sapiens FK506 binding protein 12-rapamycin associated protein 1 (FRAP1), mRNA   |
| NM_001478 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:(N-acetylneuraminy)-galactosylglucosylceramide N-acetylgalactosaminyltransferase (GalNAc-T) (GALGT), mRNA    |
| NM_004031 | Homo sapiens interferon regulatory factor 7 (IRF7), transcript variant d, mRNA   |
| NM_004030 | Homo sapiens interferon regulatory factor 7 (IRF7), transcript variant c, mRNA   |
| NM_004029 | Homo sapiens interferon regulatory factor 7 (IRF7), transcript variant b, mRNA   |
| NM_004034 | Homo sapiens annexin A7 (ANXA7), transcript variant 2, mRNA  |
| NM_001156 | Homo sapiens annexin A7 (ANXA7), transcript variant 1, mRNA  |
| NM_004033 | Homo sapiens annexin A6 (ANXA6), transcript variant 2, mRNA  |
| NM_001155 | Homo sapiens annexin A6 (ANXA6), transcript variant 1, mRNA  |
| NM_004629 | Homo sapiens Fanconi anemia, complementation group G (FANCG), mRNA   |
| NM_004738 | Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein   |

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|           | B and C (VAPB), mRNA   |
| NM_004774 | Homo sapiens PPAR binding protein (PPARBP), mRNA   |
| NM_004819 | Homo sapiens symplekin; Huntingtin interacting protein I (SPK), mRNA   |
| NM_004169 | Homo sapiens serine hydroxymethyltransferase 1 (soluble) (SHMT1), mRNA   |
| NM_004186 | Homo sapiens sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F (SEMA3F), mRNA                     |
| NM_004730 | Homo sapiens eukaryotic translation termination factor 1 (ETF1), mRNA  |
| NM_004161 | Homo sapiens RAB1, member RAS oncogene family (RAB1), mRNA   |
| NM_004762 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1), transcript variant 1, mRNA                     |
| NM_004253 | Homo sapiens phospholipase A2-activating protein (PLAA), mRNA  |
| NM_004562 | Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 1, mRNA                           |
| NM_004705 | Homo sapiens protein-kinase, interferon-inducible double stranded RNA dependent inhibitor, repressor of (P58 repressor) (PRKRIR), mRNA |
| NM_004883 | Homo sapiens neuregulin 2 (NRG2), transcript variant 1, mRNA   |
| NM_004559 | Homo sapiens nuclease sensitive element binding protein 1 (NSEP1), mRNA  |
| NM_004646 | Homo sapiens nephrosis 1, congenital, Finnish type (nephrin) (NPHS1), mRNA   |
| NM_004897 | Homo sapiens multiple inositol polyphosphate phosphatase 1 (MINPP1), mRNA  |
| NM_004527 | Homo sapiens mesenchyme homeo box 1 (MEOX1), transcript variant 1, mRNA  |
| NM_004912 | Homo sapiens cerebral cavernous malformations 1 (CCM1), mRNA   |
| NM_001572 | Homo sapiens interferon regulatory factor 7 (IRF7), transcript variant a, mRNA   |
| NM_004516 | Homo sapiens interleukin enhancer binding factor 3, 90kD (ILF3), mRNA  |
| NM_004505 | Homo sapiens ubiquitin specific protease 6 (Tre-2 oncogene) (USP6), mRNA   |
| NM_004761 | Homo sapiens RAB2, member RAS oncogene family-like (RAB2L), mRNA   |
| NM_004495 | Homo sapiens neuregulin 1 (NRG1), transcript variant HRG-gamma, mRNA   |
| NM_004821 | Homo sapiens heart and neural crest derivatives expressed 1 (HAND1), mRNA  |
| NM_004458 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4), transcript variant 1, mRNA  |
| NM_004091 | Homo sapiens E2F transcription factor 2 (E2F2), mRNA   |
| NM_004714 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1B (DYRK1B), transcript variant a, mRNA                    |
| NM_004859 | Homo sapiens clathrin, heavy polypeptide (Hc) (CLTC), mRNA   |
| NM_004921 | Homo sapiens chloride channel, calcium activated, family member 3 (CLCA3), mRNA  |
| NM_004344 | Homo sapiens centrin, EF-hand protein, 2 (CETN2), mRNA   |
| NM_004332 | Homo sapiens biphenyl hydrolase-like (serine hydrolase; breast epithelial mucin-associated antigen) (BPHL), mRNA                       |
| NM_004842 | Homo sapiens A kinase (PRKA) anchor protein 7 (AKAP7), mRNA  |
| NM_004194 | Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA  |
| NM_004300 | Homo sapiens acid phosphatase 1, soluble (ACP1), transcript variant a, mRNA  |
| NM_004769 | Homo sapiens amiloride-sensitive cation channel 3, testis (ACCN3), transcript variant 1, mRNA  |
| NM_004027 | Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), transcript variant a, mRNA                                  |
| NM_004003 | Homo sapiens carnitine acetyltransferase (CRAT), nuclear gene encoding mitochondrial protein, transcript variant peroxisomal, mRNA     |
| NM_004028 | Homo sapiens aquaporin 4 (AQP4), transcript variant b, mRNA  |
| NM_001650 | Homo sapiens aquaporin 4 (AQP4), transcript variant a, mRNA  |
| NM_002390 | Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11), transcript variant 1, mRNA  |

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| NM_001604 | Homo sapiens paired box gene 6 (aniridia, keratitis) (PAX6), mRNA  |
| NM_003995 | Homo sapiens natriuretic peptide receptor B/guanylate cyclase B (atriuretic peptide receptor B) (NPR2), mRNA                         |
| NM_003994 | Homo sapiens KIT ligand (KITLG), mRNA  |
| NM_001063 | Homo sapiens transferrin (TF), mRNA  |
| NM_003990 | Homo sapiens paired box gene 2 (PAX2), transcript variant e, mRNA  |
| NM_003989 | Homo sapiens paired box gene 2 (PAX2), transcript variant d, mRNA  |
| NM_003988 | Homo sapiens paired box gene 2 (PAX2), transcript variant c, mRNA  |
| NM_003987 | Homo sapiens paired box gene 2 (PAX2), transcript variant a, mRNA  |
| NM_000278 | Homo sapiens paired box gene 2 (PAX2), transcript variant b, mRNA  |
| NM_000221 | Homo sapiens ketohexokinase (fructokinase) (KHK), transcript variant a, mRNA   |
| NM_000115 | Homo sapiens endothelin receptor type B (EDNRB), transcript variant 1, mRNA  |
| NM_000755 | Homo sapiens carnitine acetyltransferase (CRAT), nuclear gene encoding mitochondrial protein, transcript variant mitochondrial, mRNA |
| NM_001292 | Homo sapiens CDC-like kinase 3 (CLK3), transcript variant phck3/152, mRNA  |
| NM_001291 | Homo sapiens CDC-like kinase 2 (CLK2), transcript variant phck2/139, mRNA  |
| NM_001282 | Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA   |
| NM_001272 | Homo sapiens chromodomain helicase DNA binding protein 3 (CHD3), mRNA  |
| NM_001268 | Homo sapiens chromosome condensation 1-like (CHC1L), mRNA  |
| NM_000734 | Homo sapiens CD3Z antigen, zeta polypeptide (TiT3 complex) (CD3Z), mRNA  |
| NM_000657 | Homo sapiens B-cell CLL/lymphoma 2 (BCL2), nuclear gene encoding mitochondrial protein, transcript variant beta, mRNA                |
| NM_000633 | Homo sapiens B-cell CLL/lymphoma 2 (BCL2), nuclear gene encoding mitochondrial protein, transcript variant alpha, mRNA               |
| NM_000055 | Homo sapiens butyrylcholinesterase (BCHE), mRNA  |
| NM_003594 | Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA  |
| NM_003722 | Homo sapiens tumor protein 63 kDa with strong homology to p53 (TP63), mRNA   |
| NM_003856 | Homo sapiens interleukin 1 receptor-like 1 (IL1RL1), mRNA  |
| NM_003140 | Homo sapiens sex determining region Y (SRY), mRNA  |
| NM_003615 | Homo sapiens solute carrier family 4, sodium bicarbonate cotransporter, member 7 (SLC4A7), mRNA                                      |
| NM_003759 | Homo sapiens solute carrier family 4, sodium bicarbonate cotransporter, member 4 (SLC4A4), mRNA                                      |
| NM_002980 | Homo sapiens secretin receptor (SCTR), mRNA  |
| NM_002890 | Homo sapiens RAS p21 protein activator (GTPase activating protein) 1 (RASA1), transcript variant 1, mRNA                             |
| NM_003624 | Homo sapiens RAN binding protein 3 (RANBP3), transcript variant RANBP3-a, mRNA   |
| NM_002817 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 13 (PSMD13), mRNA  |
| NM_000447 | Homo sapiens presenilin 2 (Alzheimer disease 4) (PSEN2), transcript variant 1, mRNA  |
| NM_000021 | Homo sapiens presenilin 1 (Alzheimer disease 3) (PSEN1), transcript variant 1-467, mRNA  |
| NM_002768 | Homo sapiens procollagen (type III) N-endopeptidase (PCOLN3), mRNA   |
| NM_002752 | Homo sapiens mitogen-activated protein kinase 9 (MAPK9), mRNA  |
| NM_002656 | Homo sapiens pleiomorphic adenoma gene-like 1 (PLAGL1), transcript variant 1, mRNA   |
| NM_002635 | Homo sapiens solute carrier family 25 (mitochondrial carrier; phosphate carrier),  |



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|           | member 3 (SLC25A3), nuclear gene encoding mitochondrial protein, transcript variant 1b, mRNA                                   |
| NM_002584 | Homo sapiens paired box gene 7 (PAX7), transcript variant 1, mRNA  |
| NM_000280 | Homo sapiens paired box gene 6 (aniridia, keratitis) (PAX6), mRNA  |
| NM_002555 | Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA                             |
| NM_000907 | Homo sapiens natriuretic peptide receptor B/guanylate cyclase B (atrionatriuretic peptide receptor B) (NPR2), mRNA             |
| NM_002515 | Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), transcript variant 1, mRNA   |
| NM_003204 | Homo sapiens nuclear factor (erythroid-derived 2)-like 1 (NFE2L1), mRNA  |
| NM_003970 | Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA  |
| NM_000899 | Homo sapiens KIT ligand (KITLG), mRNA  |
| NM_002394 | Homo sapiens solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2 (SLC3A2), mRNA         |
| NM_001879 | Homo sapiens mannan-binding lectin serine protease 1 (C4/C2 activating component of Ra-reactive factor) (MASP1), mRNA          |
| NM_002353 | Homo sapiens tumor-associated calcium signal transducer 2 (TACSTD2), mRNA  |
| NM_002341 | Homo sapiens lymphotoxin beta (TNF superfamily, member 3) (LTB), transcript variant 1, mRNA                                    |
| NM_002294 | Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), transcript variant LAMP2A, mRNA                                  |
| NM_002264 | Homo sapiens karyopherin alpha 1 (importin alpha 5) (KPNA1), mRNA  |
| NM_002261 | Homo sapiens killer cell lectin-like receptor subfamily C, member 3 (KLRC3), transcript variant NKG2-E, mRNA                   |
| NM_002230 | Homo sapiens junction plakoglobin (JUP), transcript variant 1, mRNA  |
| NM_001566 | Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107kD (INPP4A), transcript variant b, mRNA                          |
| NM_002164 | Homo sapiens indoleamine-pyrrole 2,3 dioxygenase (INDO), mRNA  |
| NM_003822 | Homo sapiens nuclear receptor subfamily 5, group A, member 2 (NR5A2), mRNA   |
| NM_000836 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA  |
| NM_000828 | Homo sapiens glutamate receptor, ionotropic, AMPA 3 (GRIA3), transcript variant flop, mRNA                                     |
| NM_002056 | Homo sapiens glutamine-fructose-6-phosphate transaminase 1 (GFPT1), mRNA   |
| NM_000161 | Homo sapiens GTP cyclohydrolase 1 (dopa-responsive dystonia) (GCH1), mRNA  |
| NM_000159 | Homo sapiens glutaryl-Coenzyme A dehydrogenase (GCDH), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA |
| NM_003644 | Homo sapiens growth arrest-specific 7 (GAS7), transcript variant a, mRNA   |
| NM_000817 | Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD67, mRNA                                    |
| NM_000813 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, beta 2 (GABRB2), transcript variant 2, mRNA                            |
| NM_000146 | Homo sapiens ferritin, light polypeptide (FTL), mRNA   |
| NM_001996 | Homo sapiens fibulin 1 (FBLN1), transcript variant C, mRNA   |
| NM_001995 | Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 1 (FACL1), nuclear gene encoding mitochondrial protein, mRNA             |
| NM_001973 | Homo sapiens ELK4, ETS-domain protein (SRF accessory protein 1) (ELK4), transcript variant a, mRNA                             |

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| NM_003991 | Homo sapiens endothelin receptor type B (EDNRB), transcript variant 2, mRNA  |
| NM_001925 | Homo sapiens defensin, alpha 4, corticostatin (DEFA4), mRNA  |
| NM_001359 | Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DECR1), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001337 | Homo sapiens chemokine (C-X3-C) receptor 1 (CX3CR1), mRNA  |
| NM_001835 | Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 1, mRNA   |
| NM_001834 | Homo sapiens clathrin, light polypeptide (Lcb) (CLTB), transcript variant nonbrain, mRNA   |
| NM_003992 | Homo sapiens CDC-like kinase 3 (CLK3), transcript variant phclk3, mRNA   |
| NM_003993 | Homo sapiens CDC-like kinase 2 (CLK2), transcript variant phclk2, mRNA   |
| NM_001286 | Homo sapiens chloride channel 6 (CLCN6), transcript variant CIC-6a, mRNA   |
| NM_001285 | Homo sapiens chloride channel, calcium activated, family member 1 (CLCA1), mRNA  |
| NM_001825 | Homo sapiens creatine kinase, mitochondrial 2 (sarcomeric) (CKMT2), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_003465 | Homo sapiens chitinase 1 (chitotriosidase) (CHIT1), mRNA   |
| NM_001783 | Homo sapiens CD79A antigen (immunoglobulin-associated alpha) (CD79A), transcript variant 1, mRNA   |
| NM_001199 | Homo sapiens bone morphogenetic protein 1 (BMP1), transcript variant BMP1-1, mRNA  |
| NM_001669 | Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA  |
| NM_001170 | Homo sapiens aquaporin 7 (AQP7), mRNA  |
| NM_001160 | Homo sapiens apoptotic protease activating factor (APAF1), transcript variant 2, mRNA  |
| NM_001149 | Homo sapiens ankyrin 3, node of Ranvier (ankyrin G) (ANK3), transcript variant 2, mRNA   |
| NM_001625 | Homo sapiens adenylate kinase 2 (AK2), nuclear gene encoding mitochondrial protein, transcript variant AK2A, mRNA  |
| NM_001135 | Homo sapiens aggrecan 1 (chondroitin sulfate proteoglycan 1, large aggregating proteoglycan, antigen identified by monoclonal antibody A0122) (AGC1), transcript variant 1, mRNA |
| NM_001123 | Homo sapiens adenosine kinase (ADK), transcript variant ADK-short, mRNA  |
| NM_003812 | Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23), mRNA  |
| NM_001095 | Homo sapiens amiloride-sensitive cation channel 2, neuronal (ACCN2), transcript variant 2, mRNA  |
| NM_016184 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 6 (CLECSF6), mRNA  |
| NM_003186 | Homo sapiens transgelin (TAGLN), mRNA  |
| NM_004084 | Homo sapiens defensin, alpha 1, myeloid-related sequence (DEFA1), mRNA   |
| NM_022908 | Homo sapiens hypothetical protein FLJ12442 (FLJ12442), mRNA  |
| NM_022906 | Homo sapiens hypothetical protein FLJ13195 similar to stromal antigen 3 (FLJ13195), mRNA   |
| NM_022903 | Homo sapiens hypothetical protein FLJ12800 (FLJ12800), mRNA  |
| NM_022902 | Homo sapiens hypothetical protein FLJ12496 (FLJ12496), mRNA  |
| NM_022900 | Homo sapiens hypothetical protein FLJ21213 (FLJ21213), mRNA  |
| NM_022895 | Homo sapiens hypothetical protein FLJ12448 (FLJ12448), mRNA  |
| NM_006997 | Homo sapiens transforming, acidic coiled-coil containing protein 2 (TACC2), mRNA   |
| NM_020979 | Homo sapiens adaptor protein with pleckstrin homology and src homology 2 domains (APS), mRNA   |

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| NM_018557 | Homo sapiens low density lipoprotein-related protein 1B (deleted in tumors) (LRP1B), mRNA  |
| NM_014921 | Homo sapiens lectomedin-2 (KIAA0821), mRNA   |
| NM_014112 | Homo sapiens trichorhinophalangeal syndrome I gene (TRPS1), mRNA   |
| NM_000539 | Homo sapiens rhodopsin (opsin 2, rod pigment) (retinitis pigmentosa 4, autosomal dominant) (RHO), mRNA   |
| NM_012452 | Homo sapiens transmembrane activator and CAML interactor (TACI), mRNA  |
| NM_003564 | Homo sapiens transgelin 2 (TAGLN2), mRNA   |
| NM_003632 | Homo sapiens contactin associated protein 1 (CNTNAP1), mRNA  |
| NM_006506 | Homo sapiens RAS p21 protein activator 2 (RASA2), mRNA   |
| NM_014427 | Homo sapiens copine VII (CPNE7), mRNA  |
| NM_006032 | Homo sapiens copine VI (neuronal) (CPNE6), mRNA  |
| NM_005338 | Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA   |
| NM_021973 | Homo sapiens heart and neural crest derivatives expressed 2 (HAND2), mRNA  |
| NM_005339 | Homo sapiens huntingtin interacting protein 2 (HIP2), mRNA   |
| NM_021920 | Homo sapiens secretin (SCT), mRNA  |
| NM_016491 | Homo sapiens mitochondrial ribosomal protein L37 (MRPL37), mRNA  |
| NM_014211 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, pi (GABRP), mRNA   |
| NM_004658 | Homo sapiens RAS protein activator like 1 (GAP1 like) (RASAL1), mRNA   |
| NM_004807 | Homo sapiens heparan sulfate 6-O-sulfotransferase (HS6ST), mRNA  |
| NM_002622 | Homo sapiens prefoldin 1 (PFDN1), mRNA   |
| NM_005186 | Homo sapiens calpain 1, (mu/I) large subunit (CAPN1), mRNA   |
| NM_001748 | Homo sapiens calpain 2, (m/II) large subunit (CAPN2), mRNA   |
| NM_014299 | Homo sapiens bromodomain-containing 4 (BRD4), mRNA   |
| NM_007208 | Homo sapiens mitochondrial ribosomal protein L3 (MRPL3), mRNA  |
| NM_022838 | Homo sapiens hypothetical protein FLJ12969 (FLJ12969), mRNA  |
| NM_022837 | Homo sapiens hypothetical protein FLJ22833 (FLJ22833), mRNA  |
| NM_022830 | Homo sapiens hypothetical protein FLJ22347 (FLJ22347), mRNA  |
| NM_022819 | Homo sapiens phospholipase A2, group IIF (PLA2G2F), mRNA   |
| NM_020245 | Homo sapiens tubby super-family protein (TUSP), mRNA   |
| NM_020061 | Homo sapiens opsin 1 (cone pigments), long-wave-sensitive (color blindness, protan) (OPN1LW), mRNA   |
| NM_000513 | Homo sapiens opsin 1 (cone pigments), medium-wave-sensitive (color blindness, deutan) (OPN1MW), mRNA   |
| NM_001708 | Homo sapiens opsin 1 (cone pigments), short-wave-sensitive (color blindness, tritan) (OPN1SW), mRNA  |
| NM_016363 | Homo sapiens glycoprotein VI (platelet) (GP6), mRNA  |
| NM_022139 | Homo sapiens GDNF family receptor alpha 4 (GFRA4), mRNA  |
| NM_002485 | Homo sapiens Nijmegen breakage syndrome 1 (nibrin) (NBS1), mRNA  |
| NM_006052 | Homo sapiens Down syndrome critical region gene 3 (DSCR3), mRNA  |
| NM_005867 | Homo sapiens Down syndrome critical region gene 4 (DSCR4), mRNA  |
| NM_005087 | Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA  |
| NM_004403 | Homo sapiens deafness, autosomal dominant 5 (DFNA5), mRNA  |
| NM_000433 | Homo sapiens neutrophil cytosolic factor 2 (65kD, chronic granulomatous disease, autosomal 2) (NCF2), mRNA   |
| NM_000111 | Homo sapiens solute carrier family 26, member 3 (SLC26A3), mRNA  |
| NM_000044 | Homo sapiens androgen receptor (dihydrotestosterone receptor; testicular feminization; spinal and bulbar muscular atrophy; Kennedy disease) (AR), mRNA |
| NM_000333 | Homo sapiens spinocerebellar ataxia 7 (olivopontocerebellar atrophy with retinal   |

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|           | degeneration) (SCA7), mRNA  |
| NM_003776 | Homo sapiens nuclear localization signal deleted in velocardiofacial syndrome (NLVCF), mRNA                   |
| NM_003941 | Homo sapiens Wiskott-Aldrich syndrome-like (WASL), mRNA   |
| NM_020680 | Homo sapiens N-terminal kinase-like (NTKL), mRNA  |
| NM_022789 | Homo sapiens interleukin 17E (IL17E), mRNA  |
| NM_022787 | Homo sapiens NMN adenylyltransferase; nicotinamide mononucleotide adenylyl transferase (NMNAT), mRNA          |
| NM_022786 | Homo sapiens likely ortholog of yeast ARV1 (ARV1), mRNA   |
| NM_022785 | Homo sapiens hypothetical protein FLJ23588 (FLJ23588), mRNA   |
| NM_022775 | Homo sapiens hypothetical protein FLJ22127 (FLJ22127), mRNA   |
| NM_022773 | Homo sapiens hypothetical protein FLJ12681 (FLJ12681), mRNA   |
| NM_022772 | Homo sapiens hypothetical protein FLJ21935 (FLJ21935), mRNA   |
| NM_022761 | Homo sapiens hypothetical protein FLJ23499 (FLJ23499), mRNA   |
| NM_022756 | Homo sapiens hypothetical protein FLJ11730 (FLJ11730), mRNA   |
| NM_022739 | Homo sapiens E3 ubiquitin ligase SMURF2 (SMURF2), mRNA  |
| NM_022725 | Homo sapiens Fanconi anemia, complementation group F (FANCF), mRNA  |
| NM_017646 | Homo sapiens tRNA isopentenylpyrophosphate transferase (IPT), mRNA  |
| NM_005443 | Homo sapiens 3'-phosphoadenosine 5'-phosphosulfate synthase 1 (PAPSS1), mRNA                                  |
| NM_004670 | Homo sapiens 3'-phosphoadenosine 5'-phosphosulfate synthase 2 (PAPSS2), mRNA                                  |
| NM_001084 | Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3 (PLOD3), mRNA                                 |
| NM_022720 | Homo sapiens DiGeorge syndrome critical region gene 8 (DGCR8), mRNA   |
| NM_007331 | Homo sapiens Wolf-Hirschhorn syndrome candidate 1 (WHSC1), mRNA   |
| NM_007123 | Homo sapiens Usher syndrome 2A (autosomal recessive, mild) (USH2A), mRNA                                      |
| NM_000553 | Homo sapiens Werner syndrome (WRN), mRNA  |
| NM_006531 | Homo sapiens Probe hTg737 (polycystic kidney disease, autosomal recessive, in) (TG737), mRNA                  |
| NM_018962 | Homo sapiens Down syndrome critical region gene 6 (DSCR6), mRNA   |
| NM_018848 | Homo sapiens McKusick-Kaufman syndrome (MKKS), mRNA   |
| NM_017424 | Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA                                    |
| NM_015889 | Homo sapiens TPA inducible gene-1 (TIG-1), mRNA   |
| NM_016430 | Homo sapiens Down syndrome critical region gene 5 (DSCR5), mRNA   |
| NM_004414 | Homo sapiens Down syndrome critical region gene 1 (DSCR1), mRNA   |
| NM_013441 | Homo sapiens Down syndrome critical region gene 1-like 2 (DSCR1L2), mRNA                                      |
| NM_012436 | Homo sapiens sperm associated antigen 8 (SPAG8), mRNA   |
| NM_012227 | Homo sapiens Pseudoautosomal GTP-binding protein-like (PGPL), mRNA  |
| NM_007173 | Homo sapiens protease, serine, 23 (SPUVE), mRNA   |
| NM_000501 | Homo sapiens elastin (supravalvular aortic stenosis, Williams-Beuren syndrome) (ELN), mRNA                    |
| NM_006025 | Homo sapiens protease, serine, 22 (P11), mRNA   |
| NM_005609 | Homo sapiens phosphorylase, glycogen; muscle (McArdle syndrome, glycogen storage disease type V) (PYGM), mRNA |
| NM_004991 | Homo sapiens myelodysplasia syndrome 1 (MDS1), mRNA   |
| NM_004600 | Homo sapiens Sjogren syndrome antigen A2 (60kD, ribonucleoprotein autoantigen SS-A/Ro) (SSA2), mRNA           |
| NM_004380 | Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP), mRNA                                  |

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| NM_000551 | Homo sapiens von Hippel-Lindau syndrome (VHL), mRNA  |
| NM_000462 | Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA                     |
| NM_001064 | Homo sapiens transketolase (Wernicke-Korsakoff syndrome) (TKT), mRNA   |
| NM_000356 | Homo sapiens Treacher Collins-Franceschetti syndrome 1 (TCOF1), mRNA   |
| NM_000455 | Homo sapiens serine/threonine kinase 11 (Peutz-Jeghers syndrome) (STK11), mRNA   |
| NM_002351 | Homo sapiens SH2 domain protein 1A, Duncan's disease (lymphoproliferative syndrome) (SH2D1A), mRNA   |
| NM_000336 | Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA   |
| NM_000335 | Homo sapiens sodium channel, voltage-gated, type V, alpha polypeptide (long (electrocardiographic) QT syndrome 3) (SCN5A), mRNA              |
| NM_000318 | Homo sapiens peroxisomal membrane protein 3 (35kD, Zellweger syndrome) (PXMP3), mRNA   |
| NM_000311 | Homo sapiens prion protein (p27-30) (Creutzfeld-Jakob disease, Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia) (PRNP), mRNA |
| NM_000299 | Homo sapiens plakophilin 1 (ectodermal dysplasia/skin fragility syndrome) (PKP1), mRNA   |
| NM_000283 | Homo sapiens phosphodiesterase 6B, cGMP-specific, rod, beta (congenital stationary night blindness 3, autosomal dominant) (PDE6B), mRNA      |
| NM_003731 | Homo sapiens Sjogren's syndrome nuclear autoantigen 1 (SSNA1), mRNA  |
| NM_000260 | Homo sapiens myosin VIIA (Usher syndrome 1B (autosomal recessive, severe)) (MYO7A), mRNA   |
| NM_003720 | Homo sapiens Down syndrome critical region gene 2 (DSCR2), mRNA  |
| NM_000195 | Homo sapiens Hermansky-Pudlak syndrome (HPS), mRNA   |
| NM_000194 | Homo sapiens hypoxanthine phosphoribosyltransferase 1 (Lesch-Nyhan syndrome) (HPRT1), mRNA   |
| NM_000171 | Homo sapiens glycine receptor, alpha 1 (startle disease/hyperekplexia, stiff man syndrome) (GLRA1), mRNA                                     |
| NM_003494 | Homo sapiens dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive) (DYSF), mRNA   |
| NM_000081 | Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA   |
| NM_000052 | Homo sapiens ATPase, Cu <sup>++</sup> transporting, alpha polypeptide (Menkes syndrome) (ATP7A), mRNA  |
| NM_001635 | Homo sapiens amphiphysin (Stiff-Mann syndrome with breast cancer 128kD autoantigen) (AMPH), mRNA   |
| NM_022663 | Homo sapiens CTAGE-1 protein (CTAGE-1), mRNA   |
| NM_022662 | Homo sapiens meiotic checkpoint regulator (MCPR), mRNA   |
| NM_022658 | Homo sapiens homeo box C8 (HOXC8), mRNA  |
| NM_000569 | Homo sapiens Fc fragment of IgG, low affinity IIIa, receptor for (CD16) (FCGR3A), mRNA   |
| NM_000802 | Homo sapiens folate receptor 1 (adult) (FOLR1), transcript variant 2, mRNA   |
| NM_006991 | Homo sapiens zinc finger protein 197 (ZNF197), mRNA  |
| NM_018946 | Homo sapiens N-acetylneuraminic acid phosphate synthase; sialic acid synthase (SAS), mRNA  |
| NM_003979 | Homo sapiens retinoic acid induced 3 (RAI3), mRNA  |
| NM_021785 | Homo sapiens retinoic acid induced 2 (RAI2), mRNA  |
| NM_001436 | Homo sapiens fibrillarin (FBL), mRNA   |
| NM_012151 | Homo sapiens coagulation factor VIII-associated (intronic transcript) (F8A), mRNA  |
| NM_007170 | Homo sapiens testis-specific kinase 2 (TESK2), mRNA  |

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| NM_006285 | Homo sapiens testis-specific kinase 1 (TESK1), mRNA  |
| NM_016424 | Homo sapiens cisplatin resistance-associated overexpressed protein (LUC7A), mRNA   |
| NM_012152 | Homo sapiens endothelial differentiation, lysophosphatidic acid G-protein-coupled receptor, 7 (EDG7), mRNA               |
| NM_007360 | Homo sapiens DNA segment on chromosome 12 (unique) 2489 expressed sequence (D12S2489E), mRNA                             |
| NM_004924 | Homo sapiens actinin, alpha 4 (ACTN4), mRNA  |
| NM_001102 | Homo sapiens actinin, alpha 1 (ACTN1), mRNA  |
| NM_012128 | Homo sapiens chloride channel, calcium activated, family member 4 (CLCA4), mRNA  |
| NM_014551 | Homo sapiens hypothetical protein 384D8_6 (384D8-2), mRNA  |
| NM_018977 | Homo sapiens neuroligin 3 (NLGN3), mRNA  |
| NM_001103 | Homo sapiens actinin, alpha 2 (ACTN2), mRNA  |
| NM_022569 | Homo sapiens N-deacetylase/N-sulfotransferase 4 (NDST4), mRNA  |
| NM_005892 | Homo sapiens formin-like (FMNL), mRNA  |
| NM_016370 | Homo sapiens RAB9-like protein (RAB9L), mRNA   |
| NM_012135 | Homo sapiens DNA segment on chromosome 6(unique) 2654 expressed sequence (D6S2654E), mRNA                                |
| NM_007161 | Homo sapiens DNA segment on chromosome 6 (unique) 49 expressed sequence, NK cell triggering receptor, p30 (D6S49E), mRNA |
| NM_006114 | Homo sapiens DNA segment on chromosome 19 (unique) 1177 expressed sequence (D19S1177E), mRNA                             |
| NM_006014 | Homo sapiens DNA segment on chromosome X (unique) 9879 expressed sequence (DXS9879E), mRNA                               |
| NM_004699 | Homo sapiens DNA segment on chromosome X (unique) 9928 expressed sequence (DXS9928E), mRNA                               |
| NM_003683 | Homo sapiens DNA segment on chromosome 21 (unique) 2056 expressed sequence (D21S2056E), mRNA                             |
| NM_015484 | Homo sapiens GCIP-interacting protein p29 (P29), mRNA  |
| NM_013263 | Homo sapiens bromodomain-containing 7 (BRD7), mRNA   |
| NM_022157 | Homo sapiens Rag C protein (GTR2), mRNA  |
| NM_014604 | Homo sapiens Tax interaction protein 1 (TIP-1), mRNA   |
| NM_001915 | Homo sapiens cytochrome b-561 (CYB561), mRNA   |
| NM_012188 | Homo sapiens forkhead box I1 (FOXI1), mRNA   |
| NM_016148 | Homo sapiens somatostatin receptor-interacting protein (SSTRIP), mRNA  |
| NM_022482 | Homo sapiens hypothetical protein FLJ21794 (FLJ21794), mRNA  |
| NM_022493 | Homo sapiens hypothetical protein FLJ21988 (FLJ21988), mRNA  |
| NM_022489 | Homo sapiens hypothetical protein FLJ22056 (FLJ22056), mRNA  |
| NM_022485 | Homo sapiens hypothetical protein FLJ22405 (FLJ22405), mRNA  |
| NM_022464 | Homo sapiens endoplasmic reticulum chaperone SIL1, homolog of yeast (SIL1), mRNA   |
| NM_022456 | Homo sapiens hypothetical protein FLJ22548 similar to gene trap PAT 12 (FLJ22548), mRNA                                  |
| NM_022450 | Homo sapiens hypothetical protein FLJ22357 similar to epidermal growth factor receptor-related protein (FLJ22357), mRNA  |
| NM_022443 | Homo sapiens myeloid leukemia factor 1 (MLF1), mRNA  |
| NM_022136 | Homo sapiens SAM domain, SH3 domain and nuclear localisation signals, 1 (SAMSNI), mRNA                                   |
| NM_012217 | Homo sapiens mast cell tryptase (TPSD1), mRNA  |
| NM_020366 | Homo sapiens retinitis pigmentosa GTPase regulator interacting protein 1 (RPGRI1), mRNA                                  |

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| NM_016541 | Homo sapiens guanine nucleotide binding protein 13, gamma (GNG13), mRNA   |
| NM_004204 | Homo sapiens phosphatidylinositol glycan, class Q (PIGQ), mRNA  |
| NM_014946 | Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA  |
| NM_022146 | Homo sapiens neuropeptide FF 1; RFamide-related peptide receptor (OT7T022), mRNA  |
| NM_004885 | Homo sapiens neuropeptide G protein-coupled receptor; neuropeptide FF 2 (NPGPR), mRNA   |
| NM_002958 | Homo sapiens RYK receptor-like tyrosine kinase (RYK), mRNA  |
| NM_002931 | Homo sapiens ring finger protein 1 (RING1), mRNA  |
| NM_021111 | Homo sapiens reversion-inducing-cysteine-rich protein with kazal motifs (RECK), mRNA  |
| NM_001655 | Homo sapiens archain 1 (ARCN1), mRNA  |
| NM_016639 | Homo sapiens type I transmembrane protein Fn14 (FN14), mRNA   |
| NM_006686 | Homo sapiens actin-like 7B (ACTL7B), mRNA   |
| NM_006687 | Homo sapiens actin-like 7A (ACTL7A), mRNA   |
| NM_005856 | Homo sapiens receptor (calcitonin) activity modifying protein 3 (RAMP3), mRNA   |
| NM_005854 | Homo sapiens receptor (calcitonin) activity modifying protein 2 (RAMP2), mRNA   |
| NM_005855 | Homo sapiens receptor (calcitonin) activity modifying protein 1 (RAMP1), mRNA   |
| NM_000475 | Homo sapiens nuclear receptor subfamily 0, group B, member 1 (NR0B1), mRNA  |
| NM_005493 | Homo sapiens RAN binding protein 9 (RANBP9), mRNA   |
| NM_004634 | Homo sapiens bromodomain and PHD finger containing, 1 (BRPF1), mRNA   |
| NM_000140 | Homo sapiens ferrochelatase (protoporphyrin) (FECH), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_000031 | Homo sapiens aminolevulinic acid, delta-, dehydratase (ALAD), mRNA  |
| NM_000027 | Homo sapiens aspartylglucosaminidase (AGA), mRNA  |
| NM_000026 | Homo sapiens adenylosuccinate lyase (ADSL), mRNA  |
| NM_000025 | Homo sapiens adrenergic, beta-3-, receptor (ADRB3), mRNA  |
| NM_000020 | Homo sapiens activin A receptor type II-like 1 (ACVRL1), mRNA   |
| NM_000019 | Homo sapiens acetyl-Coenzyme A acetyltransferase 1 (acetoacetyl Coenzyme A thiolase) (ACAT1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_000018 | Homo sapiens acyl-Coenzyme A dehydrogenase, very long chain (ACADVL), nuclear gene encoding mitochondrial protein, mRNA                         |
| NM_000017 | Homo sapiens acyl-Coenzyme A dehydrogenase, C-2 to C-3 short chain (ACADS), nuclear gene encoding mitochondrial protein, mRNA                   |
| NM_000016 | Homo sapiens acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain (ACADM), nuclear gene encoding mitochondrial protein, mRNA               |
| NM_000476 | Homo sapiens adenylate kinase 1 (AK1), mRNA   |
| NM_001830 | Homo sapiens chloride channel 4 (CLCN4), mRNA   |
| NM_022365 | Homo sapiens hypothetical protein similar to mouse Dnajl1 (DNAJL1), mRNA  |
| NM_022350 | Homo sapiens aminopeptidase (LOC64167), mRNA  |
| NM_022335 | Homo sapiens hypothetical protein PRO2849 (PRO2849), mRNA   |
| NM_005259 | Homo sapiens growth differentiation factor 8 (GDF8), mRNA   |
| NM_001789 | Homo sapiens cell division cycle 25A (CDC25A), mRNA   |
| NM_022006 | Homo sapiens FXYD domain-containing ion transport regulator 7 (FXYD7), mRNA   |
| NM_022003 | Homo sapiens FXYD domain-containing ion transport regulator 6 (FXYD6), mRNA   |

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| NM_020655 | Homo sapiens junctophilin 3 (JPH3), mRNA  |
| NM_002855 | Homo sapiens poliovirus receptor-related 1 (herpesvirus entry mediator C; nectin) (PVRL1), mRNA       |
| NM_012340 | Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA |
| NM_006599 | Homo sapiens nuclear factor of activated T-cells 5, tonicity-responsive (NFAT5), mRNA                 |
| NM_006162 | Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1 (NFATC1), mRNA |
| NM_022061 | Homo sapiens ribosomal protein L17 isolog (LOC63875), mRNA  |
| NM_022095 | Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA                          |
| NM_022091 | Homo sapiens dJ467N11.1 protein (DJ467N11.1), mRNA  |
| NM_022084 | Homo sapiens hypothetical protein dJ102H19.4 (DJ102H19.4), mRNA                                       |
| NM_022077 | Homo sapiens hypothetical protein dJ1141E15.2 (DJ1141E15.2), mRNA                                     |
| NM_022098 | Homo sapiens hypothetical protein LOC63929 (LOC63929), mRNA   |
| NM_022081 | Homo sapiens hypothetical protein bK1048E9.5 (BK1048E9.5), mRNA                                       |
| NM_021081 | Homo sapiens growth hormone releasing hormone (GHRH), mRNA  |
| NM_022168 | Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA                               |
| NM_022165 | Homo sapiens Lin-7b protein (LIN-7B), mRNA  |
| NM_022161 | Homo sapiens livin inhibitor-of-apoptosis (LIVIN), mRNA   |
| NM_022159 | Homo sapiens ETL protein (ETL), mRNA  |
| NM_022156 | Homo sapiens PP3111 protein (PP3111), mRNA  |
| NM_022151 | Homo sapiens MAP-1 protein (MAP-1), mRNA  |
| NM_022150 | Homo sapiens RFamide-related peptide precursor (RFRP), mRNA   |
| NM_022149 | Homo sapiens MAGEF1 protein (MAGEF1), mRNA  |
| NM_022144 | Homo sapiens myodulin protein (LOC64102), mRNA  |
| NM_022141 | Homo sapiens gamma-parvin (PARVG), mRNA   |
| NM_022134 | Homo sapiens glycoprotein beta-Gal 3'-sulfotransferase (GP3ST), mRNA                                  |
| NM_022131 | Homo sapiens calyculin-2 (CS2), mRNA  |
| NM_022129 | Homo sapiens MAWD binding protein (MAWBP), mRNA   |
| NM_022123 | Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA   |
| NM_022121 | Homo sapiens p53-induced protein PIGPC1 (PIGPC1), mRNA  |
| NM_022120 | Homo sapiens hypothetical protein FKSG25 (FLJ00030), mRNA   |
| NM_022114 | Homo sapiens PR domain containing 16 (PRDM16), mRNA   |
| NM_022112 | Homo sapiens p53-regulated apoptosis-inducing protein 1 (P53AIP1), mRNA                               |
| NM_022111 | Homo sapiens homolog of Xenopus Claspin (CLASPIN), mRNA   |
| NM_022101 | Homo sapiens hypothetical protein FLJ22965 (FLJ22965), mRNA   |
| NM_022087 | Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA   |
| NM_022083 | Homo sapiens niban protein (NIBAN), mRNA  |
| NM_022078 | Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA   |
| NM_022076 | Homo sapiens hypothetical protein IMAGE 109914 (LOC63904), mRNA                                       |
| NM_022072 | Homo sapiens hypothetical protein FLJ22609 (FLJ22609), mRNA   |
| NM_022067 | Homo sapiens hypothetical protein FLJ12707 (FLJ12707), mRNA   |
| NM_022049 | Homo sapiens G-protein coupled receptor 88 (GPR88), mRNA  |
| NM_022044 | Homo sapiens stromal cell-derived factor 2-like 1 (SDF2L1), mRNA                                      |
| NM_022042 | Homo sapiens solute carrier family 26 (sulfate transporter), member 1 (SLC26A1), mRNA                 |
| NM_022039 | Homo sapiens split hand/foot malformation (ectrodactyly) type 3 (SHFM3), mRNA                         |
| NM_021173 | Homo sapiens polymerase (DNA-directed), delta 4 (POLD4), mRNA   |
| NM_016371 | Homo sapiens hydroxysteroid (17-beta) dehydrogenase 7 (HSD17B7), mRNA                                 |



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| NM_000023 | Homo sapiens sarcoglycan, alpha (50kD dystrophin-associated glycoprotein) (SGCA), mRNA   |
| NM_005099 | Homo sapiens a disintegrin-like and metalloprotease (repolysin type) with thrombospondin type 1 motif, 4 (ADAMTS4), mRNA   |
| NM_016590 | Homo sapiens prostate androgen-regulated transcript 1 (PART1), mRNA  |
| NM_014223 | Homo sapiens nuclear transcription factor Y, gamma (NFYC), mRNA  |
| NM_006166 | Homo sapiens nuclear transcription factor Y, beta (NFYB), mRNA   |
| NM_002268 | Homo sapiens karyopherin alpha 4 (importin alpha 3) (KPNA4), mRNA  |
| NM_005229 | Homo sapiens ELK1, member of ETS oncogene family (ELK1), mRNA  |
| NM_021796 | Homo sapiens placenta-specific 1 (PLAC1), mRNA   |
| NM_015596 | Homo sapiens kallikrein 13 (KLK13), mRNA   |
| NM_003553 | Homo sapiens olfactory receptor, family 1, subfamily E, member 1 (OR1E1), mRNA   |
| NM_021926 | Homo sapiens aristaless-like homeobox 4 (ALX4), mRNA   |
| NM_021957 | Homo sapiens glycogen synthase 2 (liver) (GYS2), mRNA  |
| NM_020980 | Homo sapiens aquaporin 9 (AQP9), mRNA  |
| NM_001614 | Homo sapiens actin, gamma 1 (ACTG1), mRNA  |
| NM_018690 | Homo sapiens apolipoprotein B48 receptor (APOB48R), mRNA   |
| NM_005230 | Homo sapiens ELK3, ETS-domain protein (SRF accessory protein 2) (ELK3), mRNA   |
| NM_003816 | Homo sapiens a disintegrin and metalloproteinase domain 9 (meltrin gamma) (ADAM9), mRNA  |
| NM_000847 | Homo sapiens glutathione S-transferase A3 (GSTA3), mRNA  |
| NM_021814 | Homo sapiens homolog of yeast long chain polyunsaturated fatty acid elongation enzyme 2 (HELO1), mRNA  |
| NM_021628 | Homo sapiens arachidonate lipoxygenase 3 (ALOXE3), mRNA  |
| NM_012419 | Homo sapiens regulator of G-protein signalling 17 (RGS17), mRNA  |
| NM_014685 | Homo sapiens homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 (HERPUD1), mRNA  |
| NM_005705 | Homo sapiens pan-hematopoietic expression (PHEMX), mRNA  |
| NM_004906 | Homo sapiens Wilms' tumour 1-associating protein (KIAA0105), mRNA  |
| NM_003101 | Homo sapiens sterol O-acyltransferase (acyl-Coenzyme A cholesterol acyltransferase) 1 (SOAT1), mRNA  |
| NM_021965 | Homo sapiens phosphoglucomutase 5 (PGM5), mRNA   |
| NM_003555 | Homo sapiens olfactory receptor, family 1, subfamily G, member 1 (OR1G1), mRNA   |
| NM_003552 | Homo sapiens olfactory receptor, family 1, subfamily D, member 4 (OR1D4), mRNA   |
| NM_001345 | Homo sapiens diacylglycerol kinase, alpha (80kD) (DGKA), mRNA  |
| NM_021620 | Homo sapiens PR domain containing 13 (PRDM13), mRNA  |
| NM_020999 | Homo sapiens neurogenin 3 (NEUROG3), mRNA  |
| NM_020227 | Homo sapiens PR domain containing 9 (PRDM9), mRNA  |
| NM_020226 | Homo sapiens PR domain containing 8 (PRDM8), mRNA  |
| NM_020229 | Homo sapiens PR domain containing 11 (PRDM11), mRNA  |
| NM_020228 | Homo sapiens PR domain containing 10 (PRDM10), mRNA  |
| NM_016412 | Homo sapiens insulin-like growth factor 2, antisense (IGF2AS), mRNA  |
| NM_006161 | Homo sapiens neurogenin 1 (NEUROG1), mRNA  |
| NM_005734 | Homo sapiens homeodomain-interacting protein kinase 3 (HIPK3), mRNA  |
| NM_001818 | Homo sapiens aldo-keto reductase family 1, member C4 (chlordecone reductase; 3-alpha hydroxysteroid dehydrogenase, type I; dihydrodiol dehydrogenase 4) (AKR1C4), mRNA |
| NM_004363 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 5   |

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|           | (CEACAM5), mRNA   |
| NM_002841 | Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA   |
| NM_002716 | Homo sapiens protein phosphatase 2 (formerly 2A), regulatory subunit A (PR65), beta isoform (PPP2R1B), mRNA   |
| NM_001785 | Homo sapiens cytidine deaminase (CDA), mRNA   |
| NM_003554 | Homo sapiens olfactory receptor, family 1, subfamily E, member 2 (OR1E2), mRNA  |
| NM_021961 | Homo sapiens TEA domain family member 1 (SV40 transcriptional enhancer factor) (TEAD1), mRNA  |
| NM_002847 | Homo sapiens protein tyrosine phosphatase, receptor type, N polypeptide 2 (PTPRN2), mRNA  |
| NM_002778 | Homo sapiens prosaposin (variant Gaucher disease and variant metachromatic leukodystrophy) (PSAP), mRNA   |
| NM_000934 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 2 (SERPINF2), mRNA |
| NM_000932 | Homo sapiens phospholipase C, beta 3 (phosphatidylinositol-specific) (PLCB3), mRNA  |
| NM_000709 | Homo sapiens branched chain keto acid dehydrogenase E1, alpha polypeptide (maple syrup urine disease) (BCKDHA), mRNA                                |
| NM_001666 | Homo sapiens Rho GTPase activating protein 4 (ARHGAP4), mRNA  |
| NM_021815 | Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC5A7), mRNA   |
| NM_014885 | Homo sapiens anaphase-promoting complex 10 (APC10), mRNA  |
| NM_021948 | Homo sapiens chondroitin sulfate proteoglycan BEHAB/brevican (BCAN), mRNA   |
| NM_021946 | Homo sapiens hypothetical protein FLJ11362 (FLJ11362), mRNA   |
| NM_021942 | Homo sapiens hypothetical protein FLJ12716 (FLJ12716), mRNA   |
| NM_021940 | Homo sapiens hypothetical protein FLJ13159 (FLJ13159), mRNA   |
| NM_021922 | Homo sapiens Fanconi anemia, complementation group E (FANCE), mRNA  |
| NM_002644 | Homo sapiens polymeric immunoglobulin receptor (PIGR), mRNA   |
| NM_002470 | Homo sapiens myosin, heavy polypeptide 3, skeletal muscle, embryonic (MYH3), mRNA   |
| NM_001700 | Homo sapiens azurocidin 1 (cationic antimicrobial protein 37) (AZU1), mRNA  |
| NM_003949 | Homo sapiens huntingtin-associated protein 1 (neuroan 1) (HAP1), mRNA   |
| NM_021021 | Homo sapiens syntrophin, beta 1 (dystrophin-associated protein A1, 59kD, basic component 1) (SNTB1), mRNA   |
| NM_018953 | Homo sapiens homeo box C5 (HOXC5), mRNA   |
| NM_012120 | Homo sapiens CD2-associated protein (CD2AP), mRNA   |
| NM_007121 | Homo sapiens nuclear receptor subfamily 1, group H, member 2 (NR1H2), mRNA  |
| NM_006753 | Homo sapiens surfactant protein 6 (SURF6), mRNA   |
| NM_006200 | Homo sapiens proprotein convertase subtilisin/kexin type 5 (PCSK5), mRNA  |
| NM_006426 | Homo sapiens dihydropyrimidinase-like 4 (DPYSL4), mRNA  |
| NM_005670 | Homo sapiens epilepsy, progressive myoclonus type 2, Lafora disease (laforin) (EPM2A), mRNA   |
| NM_006877 | Homo sapiens guanosine monophosphate reductase (GMPR), mRNA   |
| NM_004619 | Homo sapiens TNF receptor-associated factor 5 (TRAF5), mRNA   |
| NM_002627 | Homo sapiens phosphofructokinase, platelet (PFKP), mRNA   |
| NM_002433 | Homo sapiens myelin oligodendrocyte glycoprotein (MOG), mRNA  |
| NM_002207 | Homo sapiens integrin, alpha 9 (ITGA9), mRNA  |
| NM_002113 | Homo sapiens H factor (complement)-like 1 (HFL1), mRNA  |
| NM_002074 | Homo sapiens guanine nucleotide binding protein (G protein), beta polypeptide 1   |

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|           | (GNB1), mRNA   |
| NM_003733 | Homo sapiens 2'-5'-oligoadenylate synthetase-like (OASL), mRNA   |
| NM_002551 | Homo sapiens olfactory receptor, family 3, subfamily A, member 2 (OR3A2), mRNA   |
| NM_002389 | Homo sapiens membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen) (MCP), mRNA                           |
| NM_000870 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 4 (HTR4), mRNA   |
| NM_000613 | Homo sapiens hemopexin (HPX), mRNA   |
| NM_000377 | Homo sapiens Wiskott-Aldrich syndrome (eczema-thrombocytopenia) (WAS), mRNA  |
| NM_006981 | Homo sapiens nuclear receptor subfamily 4, group A, member 3 (NR4A3), mRNA   |
| NM_000368 | Homo sapiens TSC1 gene (hamartin) (TSC1), mRNA   |
| NM_017416 | Homo sapiens interleukin 1 receptor accessory protein-like 2 (IL1RAPL2), mRNA  |
| NM_003286 | Homo sapiens topoisomerase (DNA) I (TOP1), mRNA  |
| NM_001068 | Homo sapiens topoisomerase (DNA) II beta (180kD) (TOP2B), mRNA   |
| NM_020470 | Homo sapiens putative transmembrane protein; homolog of yeast Golgi membrane protein Yif1p (Yif1p-interacting factor) (54TM), mRNA |
| NM_006562 | Homo sapiens transcription factor similar to D. melanogaster homeodomain protein lady bird late (LBX1), mRNA                       |
| NM_017545 | Homo sapiens hydroxyacid oxidase (glycolate oxidase) 1 (HAO1), mRNA  |
| NM_002925 | Homo sapiens regulator of G-protein signalling 10 (RGS10), mRNA  |
| NM_012263 | Homo sapiens tubulin tyrosine ligase-like 1 (TTLL1), mRNA  |
| NM_001212 | Homo sapiens complement component 1, q subcomponent binding protein (C1QBP), nuclear gene encoding mitochondrial protein, mRNA     |
| NM_000491 | Homo sapiens complement component 1, q subcomponent, beta polypeptide (C1QB), mRNA   |
| NM_004720 | Homo sapiens endothelial differentiation, lysophosphatidic acid G-protein-coupled receptor, 4 (EDG4), mRNA                         |
| NM_006217 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade I (neuroserpin), member 2 (SERPINI2), mRNA                           |
| NM_018723 | Homo sapiens ataxin 2-binding protein 1 (A2BP1), mRNA  |
| NM_004543 | Homo sapiens nebulin (NEB), mRNA   |
| NM_016151 | Homo sapiens prostate derived STE20-like kinase PSK (PSK), mRNA  |
| NM_016528 | Homo sapiens hydroxyacid oxidase 3 (medium-chain) (HAO3), mRNA   |
| NM_000185 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade D (heparin cofactor), member 1 (SERPIND1), mRNA                      |
| NM_005410 | Homo sapiens selenoprotein P, plasma, 1 (SEPP1), mRNA  |
| NM_005226 | Homo sapiens endothelial differentiation, sphingolipid G-protein-coupled receptor, 3 (EDG3), mRNA                                  |
| NM_005172 | Homo sapiens atonal homolog 1 (Drosophila) (ATOH1), mRNA   |
| NM_005109 | Homo sapiens oxidative-stress responsive 1 (OSR1), mRNA  |
| NM_001498 | Homo sapiens glutamate-cysteine ligase, catalytic subunit (GCLC), mRNA   |
| NM_003922 | Homo sapiens hect (homologous to the E6-AP (UBE3A) carboxyl terminus) domain and RCC1 (CHC1)-like domain (RLD) 1 (HERC1), mRNA     |
| NM_002061 | Homo sapiens glutamate-cysteine ligase, modifier subunit (GCLM), mRNA  |
| NM_001088 | Homo sapiens arylalkylamine N-acetyltransferase (AANAT), mRNA  |
| NM_021828 | Homo sapiens heparanase-like protein (HPA2), mRNA  |
| NM_021826 | Homo sapiens hypothetical protein FLJ13149 (FLJ13149), mRNA  |
| NM_021823 | Homo sapiens hypothetical protein MDS018 (MDS018), mRNA  |
| NM_021820 | Homo sapiens MDS024 protein (MDS024), mRNA   |

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| NM_021819 | Homo sapiens ERGL protein (ERGL), mRNA   |
| NM_021818 | Homo sapiens WW Domain-Containing Gene (WW45), mRNA  |
| NM_021812 | Homo sapiens blepharophimosis, epicanthus inversus and ptosis, candidate 1 (BPESC1), mRNA  |
| NM_021809 | Homo sapiens TGF(beta)-induced transcription factor 2 (TGIF2), mRNA  |
| NM_021805 | Homo sapiens single Ig IL-1R-related molecule (SIGIRR), mRNA   |
| NM_021803 | Homo sapiens interleukin 21 (IL21), mRNA   |
| NM_021798 | Homo sapiens interleukin 21 receptor (IL21R), mRNA   |
| NM_020982 | Homo sapiens claudin 9 (CLDN9), mRNA   |
| NM_006657 | Homo sapiens formiminotransferase cyclodeaminase (FTCD), mRNA  |
| NM_021784 | Homo sapiens hepatocyte nuclear factor 3, beta (HNF3B), mRNA   |
| NM_014375 | Homo sapiens fetuin B (FETUB), mRNA  |
| NM_021032 | Homo sapiens fibroblast growth factor 12 (FGF12), mRNA   |
| NM_019595 | Homo sapiens intersectin 2 (ITSN2), mRNA   |
| NM_018991 | Homo sapiens DKFZp434A0131 protein (DKFZP434A0131), mRNA   |
| NM_014574 | Homo sapiens nuclear autoantigen (GS2NA), mRNA   |
| NM_021002 | Homo sapiens interferon, alpha 6 (IFNA6), mRNA   |
| NM_001676 | Homo sapiens ATPase, H+/K+ transporting, nongastric, alpha polypeptide (ATP12A), mRNA  |
| NM_019886 | Homo sapiens carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7 (CHST7), mRNA   |
| NM_017581 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 9 (CHRNA9), mRNA   |
| NM_001695 | Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 42kD (ATP6C), mRNA  |
| NM_006303 | Homo sapiens JTV1 gene (JTV1), mRNA  |
| NM_014413 | Homo sapiens heme-regulated initiation factor 2-alpha kinase (HRI), mRNA   |
| NM_012149 | Homo sapiens double homeobox, 5 (DUX5), mRNA   |
| NM_012146 | Homo sapiens double homeobox, 1 (DUX1), mRNA   |
| NM_021733 | Homo sapiens testis-specific kinase substrate (TSKS), mRNA   |
| NM_004339 | Homo sapiens pituitary tumor-transforming 1 interacting protein (PTTG1IP), mRNA  |
| NM_004219 | Homo sapiens pituitary tumor-transforming 1 (PTTG1), mRNA  |
| NM_003860 | Homo sapiens Breakpoint cluster region protein, uterine leiomyoma, 1; barrier to autointegration factor (BCRP1), mRNA            |
| NM_007281 | Homo sapiens scrapie responsive protein 1 (SCRG1), mRNA  |
| NM_006618 | Homo sapiens putative DNA/chromatin binding motif (PLU-1), mRNA  |
| NM_005797 | Homo sapiens epithelial V-like antigen 1 (EVA1), mRNA  |
| NM_005508 | Homo sapiens chemokine (C-C motif) receptor 4 (CCR4), mRNA   |
| NM_005283 | Homo sapiens chemokine (C motif) XC receptor 1 (CCXCR1), mRNA  |
| NM_002547 | Homo sapiens oligophrenin 1 (OPHN1), mRNA  |
| NM_020056 | Homo sapiens major histocompatibility complex, class II, DQ alpha 2 (HLA-DQA2), mRNA   |
| NM_001085 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3), mRNA |
| NM_013974 | Homo sapiens dimethylarginine dimethylaminohydrolase 2 (DDAH2), mRNA   |
| NM_001756 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 6 (SERPINA6), mRNA |
| NM_000450 | Homo sapiens selectin E (endothelial adhesion molecule 1) (SELE), mRNA   |
| NM_006228 | Homo sapiens prepronociceptin (PNOC), mRNA   |
| NM_001319 | Homo sapiens casein kinase 1, gamma 2 (CSNK1G2), mRNA  |
| NM_000444 | Homo sapiens phosphate regulating gene with homologies to endopeptidases on  |

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|           | the X chromosome (hypophosphatemia, vitamin D resistant rickets) (PHEX), mRNA  |
| NM_021183 | Homo sapiens hypothetical protein similar to small G proteins, especially RAP-2A (LOC57826), mRNA  |
| NM_021179 | Homo sapiens hypothetical protein LOC57821 (LOC57821), mRNA  |
| NM_002744 | Homo sapiens protein kinase C, zeta (PRKCZ), mRNA  |
| NM_000624 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 5 (SERPINA5), mRNA           |
| NM_000602 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 (SERPINE1), mRNA |
| NM_020422 | Homo sapiens hypothetical protein from clone 24796 (LOC57146), mRNA  |
| NM_020183 | Homo sapiens transcription factor BMAL2 (LOC56938), mRNA   |
| NM_019598 | Homo sapiens kallikrein 12 (KLK12), mRNA   |
| NM_019103 | Homo sapiens hypothetical protein (LOC55954), mRNA   |
| NM_012397 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 13 (SERPINB13), mRNA                                   |
| NM_000527 | Homo sapiens low density lipoprotein receptor (familial hypercholesterolemia) (LDLR), mRNA   |
| NM_016200 | Homo sapiens U6 snRNA-associated Sm-like protein LSm8 (LOC51691), mRNA   |
| NM_014766 | Homo sapiens KIAA0193 gene product (KIAA0193), mRNA  |
| NM_014309 | Homo sapiens RNA binding motif protein 9 (RBM9), mRNA  |
| NM_014080 | Homo sapiens dual oxidase-like domains 2 (DUOX2), mRNA   |
| NM_014516 | Homo sapiens CCR4-NOT transcription complex, subunit 3 (CNOT3), mRNA   |
| NM_015032 | Homo sapiens KIAA0979 protein (KIAA0979), mRNA   |
| NM_014656 | Homo sapiens KIAA0040 gene product (KIAA0040), mRNA  |
| NM_015383 | Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA  |
| NM_012407 | Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA   |
| NM_002208 | Homo sapiens integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide) (ITGAE), mRNA                        |
| NM_002309 | Homo sapiens leukemia inhibitory factor (cholinergic differentiation factor) (LIF), mRNA   |
| NM_006919 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 3 (SERPINB3), mRNA                                     |
| NM_006220 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 2 (SERPINA2), mRNA           |
| NM_006215 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 4 (SERPINA4), mRNA           |
| NM_006021 | Homo sapiens deleted in lymphocytic leukemia, 2 (DLEU2), mRNA  |
| NM_005887 | Homo sapiens deleted in lymphocytic leukemia, 1 (DLEU1), mRNA  |
| NM_005603 | Homo sapiens ATPase, Class I, type 8B, member 1 (ATP8B1), mRNA   |
| NM_005232 | Homo sapiens EphA1 (EPHA1), mRNA   |
| NM_005024 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 10 (SERPINB10), mRNA                                   |
| NM_004779 | Homo sapiens CCR4-NOT transcription complex, subunit 8 (CNOT8), mRNA   |
| NM_004155 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 9 (SERPINB9), mRNA                                     |
| NM_004568 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 6 (SERPINB6), mRNA                                     |
| NM_004408 | Homo sapiens dynamin 1 (DNM1), mRNA  |
| NM_004409 | Homo sapiens dystrophin myotonic-protein kinase (DMPK), mRNA   |
| NM_004717 | Homo sapiens diacylglycerol kinase, iota (DGKI), mRNA  |

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| NM_000214 | Homo sapiens jagged 1 (Alagille syndrome) (JAG1), mRNA  |
| NM_001347 | Homo sapiens diacylglycerol kinase, theta (110kD) (DGKQ), mRNA  |
| NM_003454 | Homo sapiens zinc finger protein 200 (ZNF200), mRNA   |
| NM_003334 | Homo sapiens ubiquitin-activating enzyme E1 (A1S9T and BN75 temperature sensitivity complementing) (UBE1), mRNA                                     |
| NM_000354 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7), mRNA                    |
| NM_000945 | Homo sapiens protein phosphatase 3 (formerly 2B), regulatory subunit B (19kD), alpha isoform (calcineurin B, type I) (PPP3R1), mRNA                 |
| NM_000305 | Homo sapiens paraoxonase 2 (PON2), mRNA   |
| NM_000928 | Homo sapiens phospholipase A2, group IB (pancreas) (PLA2G1B), nuclear gene encoding mitochondrial protein, mRNA                                     |
| NM_000295 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1 (SERPINA1), mRNA                    |
| NM_002640 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 8 (SERPINB8), mRNA  |
| NM_002639 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 5 (SERPINB5), mRNA  |
| NM_002615 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1 (SERPINF1), mRNA |
| NM_002575 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 2 (SERPINB2), mRNA  |
| NM_000220 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 1 (KCNJ1), mRNA   |
| NM_000191 | Homo sapiens 3-hydroxymethyl-3-methylglutaryl-Coenzyme A lyase (hydroxymethylglutaricaciduria) (HMGCL), mRNA  |
| NM_001978 | Homo sapiens erythrocyte membrane protein band 4.9 (dematin) (EPB49), mRNA  |
| NM_003646 | Homo sapiens diacylglycerol kinase, zeta (104kD) (DGKZ), mRNA   |
| NM_001346 | Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA   |
| NM_003647 | Homo sapiens diacylglycerol kinase, epsilon (64kD) (DGKE), mRNA   |
| NM_001235 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade H (heat shock protein 47), member 2 (SERPINH2), mRNA                                  |
| NM_001694 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) 16kD (ATP6L), mRNA   |
| NM_000488 | Homo sapiens serine (or cysteine) proteinase inhibitor, clade C (antithrombin), member 1 (SERPINC1), mRNA   |
| NM_021156 | Homo sapiens hypothetical protein (DJ971N18.2), mRNA  |
| NM_000875 | Homo sapiens insulin-like growth factor 1 receptor (IGF1R), mRNA  |
| NM_000605 | Homo sapiens interferon, alpha 2 (IFNA2), mRNA  |
| NM_021647 | Homo sapiens KIAA0626 gene product (KIAA0626), mRNA   |
| NM_021645 | Homo sapiens KIAA0266 gene product (KIAA0266), mRNA   |
| NM_021109 | Homo sapiens thymosin, beta 4, X chromosome (TMSB4X), mRNA  |
| NM_021642 | Homo sapiens Fc fragment of IgG, low affinity IIa, receptor for (CD32) (FCGR2A), mRNA   |
| NM_021240 | Homo sapiens testis-specific protein (LOC58524), mRNA   |
| NM_021189 | Homo sapiens hypothetical protein FLJ10698 (LOC57863), mRNA   |
| NM_021129 | Homo sapiens pyrophosphatase (inorganic) (PP), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_015140 | Homo sapiens KIAA0153 protein (KIAA0153), mRNA  |
| NM_021635 | Homo sapiens UC28 protein (UC28), mRNA  |
| NM_021631 | Homo sapiens apoptosis inhibitor (FKSG2), mRNA  |

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| NM_021615 | Homo sapiens carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6 (CHST6), mRNA                                       |
| NM_012334 | Homo sapiens myosin X (MYO10), mRNA  |
| NM_020363 | Homo sapiens deleted in azoospermia 2 (DAZ2), mRNA   |
| NM_020364 | Homo sapiens deleted in azoospermia 3 (DAZ3), mRNA   |
| NM_017445 | Homo sapiens H2B histone family, member S (H2BFS), mRNA  |
| NM_021132 | Homo sapiens protein phosphatase 3 (formerly 2B), catalytic subunit, beta isoform (calcineurin A beta) (PPP3CB), mRNA      |
| NM_021016 | Homo sapiens pregnancy specific beta-1-glycoprotein 3 (PSG3), mRNA   |
| NM_015705 | Homo sapiens hypothetical protein (DJ1042K10.2), mRNA  |
| NM_021572 | Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative function) (ENPP5), mRNA                          |
| NM_021216 | Homo sapiens endothelial zinc finger protein induced by tumor necrosis factor alpha (EZFIT), mRNA                          |
| NM_001332 | Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA |
| NM_021185 | Homo sapiens hypothetical protein DKFZp434A1022 (DKFZP434A1022), mRNA  |
| NM_018955 | Homo sapiens ubiquitin B (UBB), mRNA   |
| NM_017533 | Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA   |
| NM_014621 | Homo sapiens homeo box D4 (HOXD4), mRNA  |
| NM_000618 | Homo sapiens insulin-like growth factor 1 (somatomedia C) (IGF1), mRNA   |
| NM_021571 | Homo sapiens ICEBERG caspase-1 inhibitor (ICEBERG), mRNA   |
| NM_000045 | Homo sapiens arginase, liver (ARG1), mRNA  |
| NM_005692 | Homo sapiens ATP-binding cassette, sub-family F (GCN20), member 2 (ABCF2), mRNA  |
| NM_001090 | Homo sapiens ATP-binding cassette, sub-family F (GCN20), member 1 (ABCF1), mRNA  |
| NM_002858 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 3 (ABCD3), mRNA  |
| NM_001172 | Homo sapiens arginase, type II (ARG2), nuclear gene encoding mitochondrial protein, mRNA                                   |
| NM_001117 | Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) (ADCYAP1), mRNA  |
| NM_004036 | Homo sapiens adenylate cyclase 3 (ADCY3), mRNA   |
| NM_019843 | Homo sapiens eIF4E-transporter (4E-T), mRNA  |
| NM_006454 | Homo sapiens Mad4 homolog (MAD4), mRNA   |
| NM_002355 | Homo sapiens mannose-6-phosphate receptor (cation dependent) (M6PR), mRNA  |
| NM_014287 | Homo sapiens pM5 protein (PM5), mRNA   |
| NM_004102 | Homo sapiens fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3), mRNA               |
| NM_000134 | Homo sapiens fatty acid binding protein 2, intestinal (FABP2), mRNA  |
| NM_005354 | Homo sapiens jun D proto-oncogene (JUND), mRNA   |
| NM_005159 | Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA   |
| NM_019848 | Homo sapiens Protein P3 (P3), mRNA   |
| NM_003948 | Homo sapiens cyclin-dependent kinase-like 2 (CDC2-related kinase) (CDKL2), mRNA  |
| NM_021131 | Homo sapiens protein phosphatase 2A, regulatory subunit B' (PR 53) (PPP2R4), mRNA  |
| NM_021268 | Homo sapiens interferon, alpha 17 (IFNA17), mRNA   |
| NM_002339 | Homo sapiens lymphocyte-specific protein 1 (LSP1), mRNA  |

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| NM_001166 | Homo sapiens baculoviral IAP repeat-containing 2 (BIRC2), mRNA                                |
| NM_003399 | Homo sapiens X-prolyl aminopeptidase (aminopeptidase P) 2, membrane-bound (XPNPEP2), mRNA     |
| NM_000541 | Homo sapiens S-antigen; retina and pineal gland (arrestin) (SAG), mRNA                        |
| NM_013262 | Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA                    |
| NM_005393 | Homo sapiens plexin B3 (PLXNB3), mRNA   |
| NM_021098 | Homo sapiens calcium channel, voltage-dependent, alpha 1H subunit (CACNA1H), mRNA             |
| NM_021257 | Homo sapiens neuroglobin (NGB), mRNA  |
| NM_021253 | Homo sapiens ring finger protein 23 (RNF23), mRNA   |
| NM_021247 | Homo sapiens protamine 3 (PRM3), mRNA   |
| NM_021242 | Homo sapiens hypothetical protein STRAIT11499 (STRAIT11499), mRNA                             |
| NM_021238 | Homo sapiens TERA protein (TERA), mRNA  |
| NM_021223 | Homo sapiens myosin light chain 2a (LOC58498), mRNA   |
| NM_021221 | Homo sapiens G5b protein (G5B), mRNA  |
| NM_021210 | Homo sapiens MUM2 protein (MUM2), mRNA  |
| NM_021208 | Homo sapiens EST-YD1 protein (EST-YD1), mRNA  |
| NM_021200 | Homo sapiens PH domain containing protein in retina 1 (PHRET1), mRNA                          |
| NM_021199 | Homo sapiens CGI-44 protein; sulfide dehydrogenase like (yeast) (CGI-44), mRNA                |
| NM_021198 | Homo sapiens nuclear LIM interactor-interacting factor (NLI-IF), mRNA                         |
| NM_021193 | Homo sapiens homeo box D12 (HOXD12), mRNA   |
| NM_021192 | Homo sapiens homeo box D11 (HOXD11), mRNA   |
| NM_021188 | Homo sapiens clones 23667 and 23775 zinc finger protein (LOC57862), mRNA                      |
| NM_021184 | Homo sapiens G4 protein (G4), mRNA  |
| NM_021177 | Homo sapiens U6 snRNA-associated Sm-like protein (LSM2), mRNA                                 |
| NM_021174 | Homo sapiens p30 DBC protein (LOC57805), mRNA   |
| NM_021167 | Homo sapiens hypothetical protein WUGSC:H_RG083M05.2 (LOC57798), mRNA                         |
| NM_021159 | Homo sapiens RAPI, GTP-GDP dissociation stimulator 1 (RAPIGDS1), mRNA                         |
| NM_021155 | Homo sapiens CD209 antigen (CD209), mRNA  |
| NM_021147 | Homo sapiens uracil-DNA glycosylase 2 (UNG2), mRNA  |
| NM_021140 | Homo sapiens ubiquitously transcribed tetratricopeptide repeat gene, X chromosome (UTX), mRNA |
| NM_021139 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B4 (UGT2B4), mRNA                  |
| NM_021138 | Homo sapiens TNF receptor-associated factor 2 (TRAF2), mRNA                                   |
| NM_021137 | Homo sapiens tumor necrosis factor, alpha-induced protein 1 (endothelial) (TNFAIP1), mRNA     |
| NM_021136 | Homo sapiens reticulon 1 (RTN1), mRNA   |
| NM_021135 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 2 (RPS6KA2), mRNA                 |
| NM_021133 | Homo sapiens ribonuclease L (2',5'-oligoadenylate synthetase-dependent) (RNASEL), mRNA        |
| NM_021130 | Homo sapiens peptidylprolyl isomerase A (cyclophilin A) (PPIA), mRNA                          |
| NM_021120 | Homo sapiens discs, large (Drosophila) homolog 3 (neuroendocrine-dlg) (DLG3), mRNA            |
| NM_004239 | Homo sapiens thyroid hormone receptor interactor 11 (TRIP11), mRNA                            |
| NM_004238 | Homo sapiens thyroid hormone receptor interactor 12 (TRIP12), mRNA                            |
| NM_004745 | Homo sapiens discs, large (Drosophila) homolog-associated protein 2 (DLGAP2), mRNA            |
| NM_004687 | Homo sapiens myotubularin related protein 4 (MTMR4), mRNA                                     |



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| NM_004348 | Homo sapiens runt-related transcription factor 2 (RUNX2), mRNA  |
| NM_021096 | Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA   |
| NM_021105 | Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA   |
| NM_002957 | Homo sapiens retinoid X receptor, alpha (RXRA), mRNA  |
| NM_006268 | Homo sapiens requiem, apoptosis response zinc finger gene (REQ), mRNA   |
| NM_001106 | Homo sapiens activin A receptor, type IIB (ACVR2B), mRNA  |
| NM_001616 | Homo sapiens activin A receptor, type II (ACVR2), mRNA  |
| NM_001105 | Homo sapiens activin A receptor, type I (ACVR1), mRNA   |
| NM_005570 | Homo sapiens lectin, mannose-binding, 1 (LMAN1), mRNA   |
| NM_021083 | Homo sapiens Kell blood group precursor (McLeod phenotype) (XK), mRNA   |
| NM_013258 | Homo sapiens apoptosis-associated speck-like protein containing a CARD (ASC), mRNA  |
| NM_006518 | Homo sapiens small proline-rich protein 2C (SPRR2C), mRNA   |
| NM_006507 | Homo sapiens regenerating islet-derived 1 beta (pancreatic stone protein, pancreatic thread protein) (REG1B), mRNA            |
| NM_006563 | Homo sapiens Kruppel-like factor 1 (erythroid) (KLF1), mRNA   |
| NM_006258 | Homo sapiens protein kinase, cGMP-dependent, type I (PRKG1), mRNA   |
| NM_006353 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 17-like 3 (HMG17L3), mRNA                                   |
| NM_005987 | Homo sapiens small proline-rich protein 1A (SPRR1A), mRNA   |
| NM_005952 | Homo sapiens metallothionein 1X (MT1X), mRNA  |
| NM_005950 | Homo sapiens metallothionein 1G (MT1G), mRNA  |
| NM_005699 | Homo sapiens interleukin 18 binding protein (IL18BP), mRNA  |
| NM_004618 | Homo sapiens topoisomerase (DNA) III alpha (TOP3A), mRNA  |
| NM_001136 | Homo sapiens advanced glycosylation end product-specific receptor (AGER), mRNA  |
| NM_000866 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1F (HTR1F), mRNA  |
| NM_000637 | Homo sapiens glutathione reductase (GSR), mRNA  |
| NM_000636 | Homo sapiens superoxide dismutase 2, mitochondrial (SOD2), mRNA   |
| NM_000635 | Homo sapiens regulatory factor X, 2 (influences HLA class II expression) (RFX2), mRNA   |
| NM_000629 | Homo sapiens interferon (alpha, beta and omega) receptor 1 (IFNAR1), mRNA   |
| NM_000625 | Homo sapiens nitric oxide synthase 2A (inducible, hepatocytes) (NOS2A), mRNA  |
| NM_003998 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (p105) (NFKB1), mRNA                        |
| NM_000621 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 2A (HTR2A), mRNA  |
| NM_000620 | Homo sapiens nitric oxide synthase 1 (neuronal) (NOS1), mRNA  |
| NM_000619 | Homo sapiens interferon, gamma (IFNG), mRNA   |
| NM_000617 | Homo sapiens solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2 (SLC11A2), mRNA              |
| NM_000616 | Homo sapiens CD4 antigen (p55) (CD4), mRNA  |
| NM_000611 | Homo sapiens CD59 antigen p18-20 (antigen identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344) (CD59), mRNA |
| NM_000610 | Homo sapiens CD44 antigen (homing function and Indian blood group system) (CD44), mRNA  |
| NM_000603 | Homo sapiens nitric oxide synthase 3 (endothelial cell) (NOS3), mRNA  |
| NM_000597 | Homo sapiens insulin-like growth factor binding protein 2 (36kD) (IGFBP2), mRNA   |
| NM_000594 | Homo sapiens tumor necrosis factor (TNF superfamily, member 2) (TNF), mRNA  |

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| NM_000585 | Homo sapiens interleukin 15 (IL15), mRNA  |
| NM_000586 | Homo sapiens interleukin 2 (IL2), mRNA  |
| NM_000577 | Homo sapiens interleukin 1 receptor antagonist (IL1RN), mRNA  |
| NM_000576 | Homo sapiens interleukin 1, beta (IL1B), mRNA   |
| NM_000574 | Homo sapiens decay accelerating factor for complement (CD55, Cromer blood group system) (DAF), mRNA                             |
| NM_000572 | Homo sapiens interleukin 10 (IL10), mRNA  |
| NM_000570 | Homo sapiens Fc fragment of IgG, low affinity IIIb, receptor for (CD16) (FCGR3B), mRNA  |
| NM_000567 | Homo sapiens C-reactive protein, pentraxin-related (CRP), mRNA  |
| NM_000566 | Homo sapiens Fc fragment of IgG, high affinity Ia, receptor for (CD64) (FCGR1A), mRNA   |
| NM_000564 | Homo sapiens interleukin 5 receptor, alpha (IL5RA), mRNA  |
| NM_000561 | Homo sapiens glutathione S-transferase M1 (GSTM1), mRNA   |
| NM_000555 | Homo sapiens doublecortin; lissencephaly, X-linked (doublecortin) (DCX), mRNA   |
| NM_000298 | Homo sapiens pyruvate kinase, liver and RBC (PKLR), nuclear gene encoding mitochondrial protein, mRNA                           |
| NM_000259 | Homo sapiens myosin VA (heavy polypeptide 12, myosin) (MYO5A), mRNA   |
| NM_000525 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 11 (KCNJ11), mRNA                                       |
| NM_021090 | Homo sapiens myotubularin related protein 3 (MTMR3), mRNA   |
| NM_021077 | Homo sapiens neuromedin B (NMB), mRNA   |
| NM_021068 | Homo sapiens interferon, alpha 4 (IFNA4), mRNA  |
| NM_006512 | Homo sapiens serum amyloid A4, constitutive (SAA4), mRNA  |
| NM_006607 | Homo sapiens pituitary tumor-transforming 2 (PTTG2), mRNA   |
| NM_021075 | Homo sapiens NADH dehydrogenase (ubiquinone) flavoprotein 3 (10kD) (NDUFV3), mRNA   |
| NM_005951 | Homo sapiens metallothionein 1H (MT1H), mRNA  |
| NM_000330 | Homo sapiens retinosischisis (X-linked, juvenile) 1 (RS1), mRNA   |
| NM_005597 | Homo sapiens nuclear factor I/C (CCAAT-binding transcription factor) (NFIC), mRNA   |
| NM_005268 | Homo sapiens gap junction protein, beta 5 (connexin 31.1) (GJB5), mRNA  |
| NM_004268 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 6 (77kD) (CRSP6), mRNA                               |
| NM_004355 | Homo sapiens CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated) (CD74), mRNA |
| NM_002760 | Homo sapiens protein kinase, Y-linked (PRKY), mRNA  |
| NM_002520 | Homo sapiens nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1), mRNA  |
| NM_002167 | Homo sapiens inhibitor of DNA binding 3, dominant negative helix-loop-helix protein (ID3), mRNA                                 |
| NM_002028 | Homo sapiens farnesyltransferase, CAAX box, beta (FNTB), mRNA   |
| NM_003491 | Homo sapiens N-acetyltransferase, homolog of S. cerevisiae ARD1 (ARD1), mRNA  |
| NM_001770 | Homo sapiens CD19 antigen (CD19), mRNA  |
| NM_001664 | Homo sapiens ras homolog gene family, member A (ARHA), mRNA   |
| NM_003919 | Homo sapiens sarcoglycan, epsilon (SGCE), mRNA  |
| NM_003841 | Homo sapiens tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C), mRNA    |
| NM_003455 | Homo sapiens zinc finger protein 202 (ZNF202), mRNA   |
| NM_003452 | Homo sapiens zinc finger protein 189 (ZNF189), mRNA   |

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| NM_003316 | Homo sapiens tetratricopeptide repeat domain 3 (TTC3), mRNA  |
| NM_003166 | Homo sapiens sulfotransferase family, cytosolic, 1A, phenol-preferring, member 3 (SULT1A3), mRNA                   |
| NM_003117 | Homo sapiens sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding) (SPAM1), mRNA                 |
| NM_002222 | Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA  |
| NM_001532 | Homo sapiens solute carrier family 29 (nucleoside transporters), member 2 (SLC29A2), mRNA                          |
| NM_001437 | Homo sapiens estrogen receptor 2 (ER beta) (ESR2), mRNA  |
| NM_001331 | Homo sapiens catenin (cadherin-associated protein), delta 1 (CTNND1), mRNA   |
| NM_001307 | Homo sapiens claudin 7 (CLDN7), mRNA   |
| NM_001194 | Homo sapiens hyperpolarization activated cyclic nucleotide-gated potassium channel 2 (HCN2), mRNA                  |
| NM_001175 | Homo sapiens Rho GDP dissociation inhibitor (GDI) beta (ARHGDI), mRNA  |
| NM_000936 | Homo sapiens pancreatic lipase (PNLIP), mRNA   |
| NM_000641 | Homo sapiens interleukin 11 (IL11), mRNA   |
| NM_000640 | Homo sapiens interleukin 13 receptor, alpha 2 (IL13RA2), mRNA  |
| NM_000615 | Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA   |
| NM_000609 | Homo sapiens stromal cell-derived factor 1 (SDF1), mRNA  |
| NM_000600 | Homo sapiens interleukin 6 (interferon, beta 2) (IL6), mRNA  |
| NM_000599 | Homo sapiens insulin-like growth factor binding protein 5 (IGFBP5), mRNA   |
| NM_000590 | Homo sapiens interleukin 9 (IL9), mRNA   |
| NM_000584 | Homo sapiens interleukin 8 (IL8), mRNA   |
| NM_000581 | Homo sapiens glutathione peroxidase 1 (GPX1), mRNA   |
| NM_000560 | Homo sapiens CD53 antigen (CD53), mRNA   |
| NM_000528 | Homo sapiens mannosidase, alpha, class 2B, member 1 (MAN2B1), mRNA   |
| NM_000404 | Homo sapiens galactosidase, beta 1 (GLB1), mRNA  |
| NM_001275 | Homo sapiens chromogranin A (parathyroid secretory protein 1) (CHGA), mRNA   |
| NM_006768 | Homo sapiens BRCA1 associated protein (BRAP), mRNA   |
| NM_003469 | Homo sapiens secretogranin II (chromogranin C) (SCG2), mRNA  |
| NM_012326 | Homo sapiens microtubule-associated protein, RP/EB family, member 3 (MAPRE3), mRNA                                 |
| NM_021057 | Homo sapiens interferon, alpha 7 (IFNA7), mRNA   |
| NM_021062 | Homo sapiens H2B histone family, member F (H2BFF), mRNA  |
| NM_021063 | Homo sapiens H2B histone family, member B (H2BFB), mRNA  |
| NM_021065 | Homo sapiens H2A histone family, member G (H2AFG), mRNA  |
| NM_004146 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7 (18kD, B18) (NDUFB7), mRNA                       |
| NM_001746 | Homo sapiens calnexin (CANX), mRNA   |
| NM_003661 | Homo sapiens apolipoprotein L (APOL), mRNA   |
| NM_021052 | Homo sapiens H2A histone family, member A (H2AFA), mRNA  |
| NM_020988 | Homo sapiens guanine nucleotide binding protein (G protein), alpha activating activity polypeptide O (GNAO1), mRNA |
| NM_000133 | Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9), mRNA   |
| NM_000130 | Homo sapiens coagulation factor V (proaccelerin, labile factor) (F5), mRNA   |
| NM_001993 | Homo sapiens coagulation factor III (thromboplastin, tissue factor) (F3), mRNA                                     |
| NM_020689 | Homo sapiens sodium calcium exchanger (NCKX3), mRNA  |
| NM_021033 | Homo sapiens RAP2A, member of RAS oncogene family (RAP2A), mRNA  |
| NM_021023 | Homo sapiens complement factor H related 3 (FHR-3), mRNA   |
| NM_021026 | Homo sapiens ret finger protein-like 1 (RFPL1), mRNA   |

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| NM_021008 | Homo sapiens suppressin (nuclear deformed epidermal autoregulatory factor-1 (DEAF-1)-related) (SPN), mRNA             |
| NM_020993 | Homo sapiens B-cell CLL/lymphoma 7A (BCL7A), mRNA   |
| NM_020994 | Homo sapiens cancer/testis antigen 2 (CTAG2), mRNA  |
| NM_021000 | Homo sapiens pituitary tumor-transforming 3 (PTTG3), mRNA   |
| NM_020997 | Homo sapiens left-right determination, factor B (LEFTB), mRNA   |
| NM_021014 | Homo sapiens synovial sarcoma, X breakpoint 3 (SSX3), mRNA  |
| NM_021015 | Homo sapiens synovial sarcoma, X breakpoint 5 (SSX5), mRNA  |
| NM_021007 | Homo sapiens sodium channel, voltage-gated, type II, alpha 2 polypeptide (SCN2A2), mRNA                               |
| NM_021012 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 12 (KCNJ12), mRNA                             |
| NM_020995 | Homo sapiens haptoglobin-related protein (HPR), mRNA  |
| NM_000347 | Homo sapiens spectrin, beta, erythrocytic (includes spherocytosis, clinical type I) (SPTB), mRNA                      |
| NM_007032 | Homo sapiens putative nuclear protein (HRIHFB2122), mRNA  |
| NM_001320 | Homo sapiens casein kinase 2, beta polypeptide (CSNK2B), mRNA   |
| NM_013252 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 5 (CLECSF5), mRNA |
| NM_020978 | Homo sapiens amylase, alpha 2B; pancreatic (AMY2B), mRNA  |
| NM_020636 | Homo sapiens zinc finger protein 275 (ZNF275), mRNA   |
| NM_020547 | Homo sapiens anti-Mullerian hormone receptor, type II (AMHR2), mRNA   |
| NM_020974 | Homo sapiens CEGP1 protein (CEGP1), mRNA  |
| NM_020681 | Homo sapiens HT018 protein (HT018), mRNA  |
| NM_020676 | Homo sapiens lipase protein (LOC57406), mRNA  |
| NM_020672 | Homo sapiens S100-type calcium binding protein A14 (LOC57402), mRNA   |
| NM_020661 | Homo sapiens activation-induced cytidine deaminase (AICDA), mRNA  |
| NM_020657 | Homo sapiens zinc finger protein 304 (ZNF304), mRNA   |
| NM_020654 | Homo sapiens sentrin/SUMO-specific protease (SENP7), mRNA   |
| NM_020646 | Homo sapiens reserved (ASCL3), mRNA   |
| NM_020640 | Homo sapiens RP42 homolog (RP42), mRNA  |
| NM_020639 | Homo sapiens ankyrin repeat domain 3 (ANKRD3), mRNA   |
| NM_020632 | Homo sapiens ATPase, H(+)-transporting, lysosomal, noncatalytic accessory protein 1B (ATP6N1B), mRNA                  |
| NM_020648 | Homo sapiens twisted gastrulation (TSG), mRNA   |
| NM_018970 | Homo sapiens G protein-coupled receptor 85 (GPR85), mRNA  |
| NM_003901 | Homo sapiens sphingosine-1-phosphate lyase 1 (SGPL1), mRNA  |
| NM_014292 | Homo sapiens chromobox homolog 6 (CBX6), mRNA   |
| NM_006735 | Homo sapiens homeo box A2 (HOXA2), mRNA   |
| NM_019041 | Homo sapiens similar to prokaryotic-type class I peptide chain release factors (LOC54516), mRNA                       |
| NM_014428 | Homo sapiens tight junction protein 3 (zona occludens 3) (TJP3), mRNA   |
| NM_020466 | Homo sapiens hypothetical protein dJ122O8.2 (DJ122O8.2), mRNA   |
| NM_020448 | Homo sapiens hypothetical protein dJ462O23.2 (DJ462O23.2), mRNA   |
| NM_020425 | Homo sapiens hypothetical protein DKFZp586E1923 (DKFZP586E1923), mRNA   |
| NM_020424 | Homo sapiens hypothetical protein A-211C6.1 (LOC57149), mRNA  |
| NM_020317 | Homo sapiens hypothetical protein dJ465N24.2.1 (DJ465N24.2.1), mRNA   |
| NM_020315 | Homo sapiens hypothetical protein dJ37E16.5 (DJ37E16.5), mRNA   |
| NM_020313 | Homo sapiens hypothetical protein (LOC57019), mRNA  |
| NM_019897 | Homo sapiens olfactory receptor, family 2, subfamily S, member 2 (OR2S2), mRNA  |

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| NM_019605 | Homo sapiens hypothetical protein (DJ667H12.2), mRNA  |
| NM_019601 | Homo sapiens Sushi domain (SCR repeat) containing (BK65A6.2), mRNA  |
| NM_018433 | Homo sapiens putative zinc finger protein (LOC55818), mRNA  |
| NM_019095 | Homo sapiens hypothetical protein (LOC54675), mRNA  |
| NM_019089 | Homo sapiens hairy and enhancer of split (Drosophila) homolog 2 (HES2), mRNA  |
| NM_018982 | Homo sapiens hypothetical protein (DJ167A19.1), mRNA  |
| NM_018974 | Homo sapiens unc93 (C.elegans) homolog A (UNC93A), mRNA   |
| NM_014499 | Homo sapiens putative purinergic receptor (P2Y10), mRNA   |
| NM_020530 | Homo sapiens oncostatin M (OSM), mRNA   |
| NM_020529 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (NFKBIA), mRNA                                       |
| NM_014204 | Homo sapiens BCL2-related ovarian killer (BOK), mRNA  |
| NM_020527 | Homo sapiens HUG1 gene (HUG1), mRNA   |
| NM_006093 | Homo sapiens proteoglycan 3 (PRG3), mRNA  |
| NM_020533 | Homo sapiens mucolipin 1 (MCOLN1), mRNA   |
| NM_007345 | Homo sapiens zinc finger protein 236 (ZNF236), mRNA   |
| NM_002217 | Homo sapiens pre-alpha (globulin) inhibitor, H3 polypeptide (ITI3), mRNA  |
| NM_018693 | Homo sapiens vitiligo-associated protein VIT-1 (VIT1), mRNA   |
| NM_006777 | Homo sapiens Kaiso (ZNF-kaiso), mRNA  |
| NM_020436 | Homo sapiens similar to SALL1 (sal (Drosophila)-like (LOC57167), mRNA   |
| NM_020142 | Homo sapiens NADH:ubiquinone oxidoreductase MLRQ subunit homolog (LOC56901), mRNA   |
| NM_020123 | Homo sapiens endomembrane protein emp70 precursor isolog (LOC56889), mRNA   |
| NM_018845 | Homo sapiens stromal cell protein (LOC55974), mRNA  |
| NM_018842 | Homo sapiens insulin receptor tyrosine kinase substrate (LOC55971), mRNA  |
| NM_018841 | Homo sapiens G-protein gamma-12 subunit (LOC55970), mRNA  |
| NM_018839 | Homo sapiens p47 protein (LOC55968), mRNA   |
| NM_016352 | Homo sapiens carboxypeptidase A3 (LOC51200), mRNA   |
| NM_016302 | Homo sapiens protein x 0001 (LOC51185), mRNA  |
| NM_014332 | Homo sapiens small muscle protein, X-linked (SMPX), mRNA  |
| NM_018948 | Homo sapiens Gene 33/Mig-6 (MIG-6), mRNA  |
| NM_014587 | Homo sapiens SRY (sex determining region Y)-box 8 (SOX8), mRNA  |
| NM_005745 | Homo sapiens accessory proteins BAP31/BAP29 (DXS1357E), mRNA  |
| NM_001094 | Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA   |
| NM_019609 | Homo sapiens metalloprotease CPX-1 (CPX-1), mRNA  |
| NM_018844 | Homo sapiens B-cell receptor-associated protein BAP29 (BAP29), mRNA   |
| NM_017572 | Homo sapiens G protein-coupled receptor kinase 7 (GPRK7), mRNA  |
| NM_016418 | Homo sapiens clone FLB5214 (LOC51219), mRNA   |
| NM_016301 | Homo sapiens protein x 0004 (LOC51184), mRNA  |
| NM_013387 | Homo sapiens ubiquinol-cytochrome c reductase complex (7.2 kD) (HSPC051), mRNA  |
| NM_020469 | Homo sapiens ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase) (ABO), mRNA |
| NM_020445 | Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA  |
| NM_020435 | Homo sapiens connexin46.6 (CX46.6), mRNA  |
| NM_020426 | Homo sapiens lysozyme homolog (LOC57151), mRNA  |
| NM_020379 | Homo sapiens 1,2-alpha-mannosidase IC (HMIC), mRNA  |
| NM_020407 | Homo sapiens Rh type B glycoprotein (RHBG), mRNA  |

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| NM_020406 | Homo sapiens polycythemia rubra vera 1; cell surface receptor (PRV1), mRNA   |
| NM_020377 | Homo sapiens cysteinyl leukotriene CysLT2 receptor; cDNA PSEC0146 from clone PLACE1006979 (LOC57105), mRNA                       |
| NM_020355 | Homo sapiens HRPAP20 short form (LOC57090), mRNA   |
| NM_020350 | Homo sapiens ATRAP protein (ATRAP), mRNA   |
| NM_020380 | Homo sapiens AF15q14 protein (AF15Q14), mRNA   |
| NM_020368 | Homo sapiens disrupter of silencing 10 (SAS10), mRNA   |
| NM_020344 | Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA                             |
| NM_020396 | Homo sapiens BCL2-like 10 (apoptosis facilitator) (BCL2L10), mRNA  |
| NM_020384 | Homo sapiens claudin 2 (CLDN2), mRNA   |
| NM_007260 | Homo sapiens lysophospholipase II (LYPLA2), mRNA   |
| NM_000390 | Homo sapiens choroideremia (Rab escort protein 1) (CHM), mRNA  |
| NM_001994 | Homo sapiens coagulation factor XIII, B polypeptide (F13B), mRNA   |
| NM_000129 | Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA   |
| NM_000505 | Homo sapiens coagulation factor XII (Hageman factor) (F12), mRNA   |
| NM_000504 | Homo sapiens coagulation factor X (F10), mRNA  |
| NM_005509 | Homo sapiens Dmx-like 1 (DMXL1), mRNA  |
| NM_001300 | Homo sapiens core promoter element binding protein (COPEB), mRNA   |
| NM_012089 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 10 (ABCB10), nuclear gene encoding mitochondrial protein, mRNA |
| NM_007188 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 8 (ABCB8), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_005689 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 6 (ABCB6), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001216 | Homo sapiens carbonic anhydrase IX (CA9), mRNA   |
| NM_000717 | Homo sapiens carbonic anhydrase IV (CA4), mRNA   |
| NM_001218 | Homo sapiens carbonic anhydrase XII (CA12), mRNA   |
| NM_001217 | Homo sapiens carbonic anhydrase XI (CA11), mRNA  |
| NM_006384 | Homo sapiens calcium and integrin binding protein (DNA-dependent protein kinase interacting protein) (SIP2-28), mRNA             |
| NM_016734 | Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA  |
| NM_000687 | Homo sapiens S-adenosylhomocysteine hydrolase (AHCY), mRNA   |
| NM_004482 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 3 (GalNAc-T3) (GALNT3), mRNA       |
| NM_004481 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 2 (GalNAc-T2) (GALNT2), mRNA       |
| NM_000512 | Homo sapiens galactosamine (N-acetyl)-6-sulfate sulfatase (Morquio syndrome, mucopolysaccharidosis type IVA) (GALNS), mRNA       |
| NM_000403 | Homo sapiens galactose-4-epimerase, UDP- (GALE), mRNA  |
| NM_020310 | Homo sapiens MAX binding protein (MNT), mRNA   |
| NM_006250 | Homo sapiens proline-rich protein HaeIII subfamily 1 (PRH1), mRNA  |
| NM_005164 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 2 (ABCD2), mRNA  |
| NM_020300 | Homo sapiens microsomal glutathione S-transferase 1 (MGST1), mRNA  |
| NM_000728 | Homo sapiens calcitonin-related polypeptide, beta (CALCB), mRNA  |
| NM_020127 | Homo sapiens tuftelin 1 (TUFT1), mRNA  |
| NM_020040 | Homo sapiens tubulin, beta polypeptide 4, member Q (TUBB4Q), mRNA  |
| NM_020126 | Homo sapiens sphingosine kinase type 2 isoform (SPHK2), mRNA   |
| NM_020203 | Homo sapiens matrix, extracellular phosphoglycoprotein with ASARM motif (bone) (MEPE), mRNA                                      |

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| NM_020231 | Homo sapiens x 010 protein (MDS010), mRNA  |
| NM_020132 | Homo sapiens lysophosphatidic acid acyltransferase-gamma1 (LPAAT-gamma1), mRNA   |
| NM_020246 | Homo sapiens cation-chloride cotransporter-interacting protein (LOC56996), mRNA  |
| NM_020243 | Homo sapiens mitochondrial import receptor Tom22 (LOC56993), mRNA  |
| NM_020240 | Homo sapiens non-kinase Cdc42 effector protein SPEC2 (LOC56990), mRNA  |
| NM_020184 | Homo sapiens ancient conserved domain protein 4 (LOC56939), mRNA   |
| NM_020178 | Homo sapiens Carbonic anhydrase-related protein 10 (LOC56934), mRNA  |
| NM_020155 | Homo sapiens chromosome 11 hypothetical protein ORF4 (LOC56834), mRNA  |
| NM_020179 | Homo sapiens FN5 protein (FN5), mRNA   |
| NM_020187 | Homo sapiens DC12 protein (DC12), mRNA   |
| NM_020156 | Homo sapiens core1 UDP-galactose:N-acetylgalactosamine-alpha-R beta 1,3-galactosyltransferase (C1GALT1), mRNA                  |
| NM_000352 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 8 (ABCC8), mRNA   |
| NM_000374 | Homo sapiens uroporphyrinogen decarboxylase (UROD), mRNA   |
| NM_002872 | Homo sapiens ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2) (RAC2), mRNA              |
| NM_004152 | Homo sapiens ornithine decarboxylase antizyme 1 (OAZ1), mRNA   |
| NM_002527 | Homo sapiens neurotrophin 3 (NTF3), mRNA   |
| NM_002295 | Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA   |
| NM_002293 | Homo sapiens laminin, gamma 1 (formerly LAMB2) (LAMC1), mRNA   |
| NM_002292 | Homo sapiens laminin, beta 2 (laminin S) (LAMB2), mRNA   |
| NM_002290 | Homo sapiens laminin, alpha 4 (LAMA4), mRNA  |
| NM_006192 | Homo sapiens paired box gene 1 (PAX1), mRNA  |
| NM_019896 | Homo sapiens DNA polymerase epsilon p12 subunit (P12), mRNA  |
| NM_000583 | Homo sapiens group-specific component (vitamin D binding protein) (GC), mRNA   |
| NM_019891 | Homo sapiens endoplasmic reticulum oxidoreductin 1-Lbeta (ERO1-L(BETA)), mRNA  |
| NM_006705 | Homo sapiens growth arrest and DNA-damage-inducible, gamma (GADD45G), mRNA   |
| NM_001924 | Homo sapiens growth arrest and DNA-damage-inducible, alpha (GADD45A), mRNA   |
| NM_019844 | Homo sapiens solute carrier family 21 (organic anion transporter), member 8 (SLC21A8), mRNA                                    |
| NM_019644 | Homo sapiens testis-specific ankyrin motif containing protein (LOC56311), mRNA   |
| NM_019842 | Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 5 (KCNQ5), mRNA                                       |
| NM_012281 | Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA                                   |
| NM_019857 | Homo sapiens CTP synthase II (CTPS2), mRNA   |
| NM_019839 | Homo sapiens seven transmembrane receptor BLTR2; leukotriene B4 receptor BLT2 (BLTR2), mRNA                                    |
| NM_005757 | Homo sapiens C3H-type zinc finger protein; similar to D. melanogaster muscleblind B protein (MBLL), mRNA                       |
| NM_004299 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 7 (ABCB7), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004683 | Homo sapiens regucalcin (senescence marker protein-30) (RGN), mRNA   |

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| NM_019618 | Homo sapiens interleukin-1 homolog 1 (IL-1H1), mRNA  |
| NM_018950 | Homo sapiens major histocompatibility complex, class I, F (HLA-F), mRNA                            |
| NM_019610 | Homo sapiens hypothetical protein 669 (LOC56267), mRNA   |
| NM_000523 | Homo sapiens homeo box D13 (HOXD13), mRNA  |
| NM_019607 | Homo sapiens hypothetical protein FLJ11267 (FLJ11267), mRNA  |
| NM_019604 | Homo sapiens class-I MHC-restricted T cell associated molecule (CRTAM), mRNA                       |
| NM_012328 | Homo sapiens microvascular endothelial differentiation gene 1 (MDG1), mRNA                         |
| NM_013303 | Homo sapiens fetal hypothetical protein (HSU84971), mRNA   |
| NM_013298 | Homo sapiens hypothetical protein (HSU79252), mRNA   |
| NM_013386 | Homo sapiens hypothetical protein (DKFZp586G0123), mRNA  |
| NM_013313 | Homo sapiens hypothetical protein (AF060862), mRNA   |
| NM_019116 | Homo sapiens similar to ubiquitin binding protein (UBPH), mRNA                                     |
| NM_018961 | Homo sapiens ubiquitin associated and SH3 domain containing, A (UBASH3A), mRNA                     |
| NM_018968 | Homo sapiens syntrophin, gamma 2 (SNTG2), mRNA   |
| NM_018967 | Homo sapiens syntrophin, gamma 1 (SNTG1), mRNA   |
| NM_018969 | Homo sapiens super conserved receptor expressed in brain 3 (SREB3), mRNA                           |
| NM_018964 | Homo sapiens solute carrier family 37 (glycerol-3-phosphate transporter), member 1 (SLC37A1), mRNA |
| NM_018945 | Homo sapiens phosphodiesterase 7B (PDE7B), mRNA  |
| NM_019066 | Homo sapiens MAGE-like 2 (MAGEL2), mRNA  |
| NM_019060 | Homo sapiens NICE-1 protein (NICE-1), mRNA   |
| NM_019099 | Homo sapiens hypothetical protein (LOC55924), mRNA   |
| NM_019003 | Homo sapiens spindlin-like (LOC54466), mRNA  |
| NM_018952 | Homo sapiens homeo box B6 (HOXB6), mRNA  |
| NM_018951 | Homo sapiens homeo box A10 (HOXA10), mRNA  |
| NM_018942 | Homo sapiens homeo box (H6 family) 1 (HMX1), mRNA  |
| NM_019109 | Homo sapiens beta-1,4 mannosyltransferase (HMT-1), mRNA  |
| NM_019052 | Homo sapiens HCR (a-helix coiled-coil rod homologue) (HCR), mRNA                                   |
| NM_018985 | Homo sapiens hypothetical protein (HCGIV.9), mRNA  |
| NM_019096 | Homo sapiens GTP binding protein 2 (GTPBP2), mRNA  |
| NM_018949 | Homo sapiens G protein-coupled receptor 14 (GPR14), mRNA   |
| NM_019048 | Homo sapiens hypothetical protein (FLJ20752), mRNA   |
| NM_019086 | Homo sapiens hypothetical protein FLJ20674 (FLJ20674), mRNA  |
| NM_019040 | Homo sapiens hypothetical protein (FLJ20498), mRNA   |
| NM_018988 | Homo sapiens hypothetical protein (FLJ20330), mRNA   |
| NM_019005 | Homo sapiens hypothetical protein (FLJ20323), mRNA   |
| NM_019027 | Homo sapiens hypothetical protein (FLJ20273), mRNA   |
| NM_019008 | Homo sapiens hypothetical protein (FLJ20232), mRNA   |
| NM_019000 | Homo sapiens hypothetical protein (FLJ20152), mRNA   |
| NM_019087 | Homo sapiens hypothetical protein FLJ20051 (FLJ20051), mRNA  |
| NM_018996 | Homo sapiens hypothetical protein (FLJ20015), mRNA   |
| NM_019021 | Homo sapiens hypothetical protein (FLJ20010), mRNA   |
| NM_019018 | Homo sapiens hypothetical protein (FLJ11127), mRNA   |
| NM_019084 | Homo sapiens hypothetical protein FLJ10895 (FLJ10895), mRNA  |
| NM_019070 | Homo sapiens hypothetical protein (FLJ10432), mRNA   |
| NM_019088 | Homo sapiens hypothetical protein F23149_1 (F23149_1), mRNA  |
| NM_019002 | Homo sapiens ETAA16 protein (ETAA16), mRNA   |
| NM_019114 | Homo sapiens EHM2 gene (EHM2), mRNA  |
| NM_018973 | Homo sapiens dolichyl-phosphate mannosyltransferase polypeptide 3 (DPM3), mRNA                     |



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| NM_018959 | Homo sapiens DAZ associated protein 1 (DAZAP1), mRNA   |
| NM_019098 | Homo sapiens cyclic nucleotide gated channel beta 3 (CNGB3), mRNA  |
| NM_018958 | Homo sapiens chromosome 15 open reading frame 2 (C15ORF2), mRNA  |
| NM_000379 | Homo sapiens xanthine dehydrogenase (XDH), mRNA  |
| NM_000552 | Homo sapiens von Willebrand factor (VWF), mRNA   |
| NM_000362 | Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3), mRNA                                   |
| NM_003255 | Homo sapiens tissue inhibitor of metalloproteinase 2 (TIMP2), mRNA   |
| NM_003001 | Homo sapiens succinate dehydrogenase complex, subunit C, integral membrane protein, 15kD (SDHC), nuclear gene encoding mitochondrial protein, mRNA |
| NM_003000 | Homo sapiens succinate dehydrogenase complex, subunit B, iron sulfur (Ip) (SDHB), nuclear gene encoding mitochondrial protein, mRNA                |
| NM_006745 | Homo sapiens sterol-C4-methyl oxidase-like (SC4MOL), mRNA  |
| NM_006860 | Homo sapiens putative GTP-binding protein similar to RAY/RAB1C (RAYL), mRNA  |
| NM_000531 | Homo sapiens ornithine carbamoyltransferase (OTC), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_000607 | Homo sapiens orosomucoid 1 (ORM1), mRNA  |
| NM_002538 | Homo sapiens occludin (OCLN), mRNA   |
| NM_002301 | Homo sapiens lactate dehydrogenase C (LDHC), transcript variant 1, mRNA  |
| NM_017448 | Homo sapiens lactate dehydrogenase C (LDHC), transcript variant 2, mRNA  |
| NM_000892 | Homo sapiens kallikrein B, plasma (Fletcher factor) 1 (KLKB1), mRNA  |
| NM_002193 | Homo sapiens inhibin, beta B (activin AB beta polypeptide) (INHBB), mRNA   |
| NM_002191 | Homo sapiens inhibin, alpha (INHA), mRNA   |
| NM_002015 | Homo sapiens forkhead box O1A (rhabdomyosarcoma) (FOXO1A), mRNA  |
| NM_004473 | Homo sapiens forkhead box E1 (thyroid transcription factor 2) (FOXE1), mRNA  |
| NM_000804 | Homo sapiens folate receptor 3 (gamma) (FOLR3), mRNA   |
| NM_000803 | Homo sapiens folate receptor 2 (fetal) (FOLR2), mRNA   |
| NM_004742 | Homo sapiens BAI1-associated protein 1 (BAIAP1), mRNA  |
| NM_004925 | Homo sapiens aquaporin 3 (AQP3), mRNA  |
| NM_007182 | Homo sapiens Ras association (RalGDS/AF-6) domain family 1 (RASSF1), mRNA  |
| NM_018941 | Homo sapiens ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) (CLN8), mRNA  |
| NM_016936 | Homo sapiens ubinuclein 1 (UBN1), mRNA   |
| NM_012406 | Homo sapiens PR domain containing 4 (PRDM4), mRNA  |
| NM_018728 | Homo sapiens myosin 5C (MYO5C), mRNA   |
| NM_017540 | Homo sapiens hypothetical protein DKFZp586H0623 (DKFZp586H0623), mRNA  |
| NM_018651 | Homo sapiens zinc finger protein (ZFP), mRNA   |
| NM_017503 | Homo sapiens surfactant 2 (SURF2), mRNA  |
| NM_018419 | Homo sapiens SRY (sex determining region Y)-box 18 (SOX18), mRNA   |
| NM_018427 | Homo sapiens RNA polymerase I transcription factor RRN3 (RRN3), mRNA   |
| NM_018545 | Homo sapiens hypothetical protein PRO2955 (PRO2955), mRNA  |
| NM_018525 | Homo sapiens hypothetical protein PRO2369 (PRO2369), mRNA  |
| NM_018520 | Homo sapiens hypothetical protein PRO2268 (PRO2268), mRNA  |
| NM_018605 | Homo sapiens hypothetical protein PRO1777 (PRO1777), mRNA  |
| NM_018573 | Homo sapiens hypothetical protein PRO1068 (PRO1068), mRNA  |
| NM_018572 | Homo sapiens hypothetical protein PRO1051 (PRO1051), mRNA  |
| NM_018569 | Homo sapiens hypothetical protein PRO0971 (PRO0971), mRNA  |
| NM_018592 | Homo sapiens hypothetical protein PRO0800 (PRO0800), mRNA  |
| NM_018563 | Homo sapiens hypothetical protein PRO0758 (PRO0758), mRNA  |

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| NM_018699 | Homo sapiens PR domain containing 5 (PRDM5), mRNA  |
| NM_017534 | Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA                  |
| NM_018461 | Homo sapiens uncharacterized hematopoietic stem/progenitor cells protein MDS026 (MDS026), mRNA |
| NM_018559 | Homo sapiens lipopolysaccharide specific response-7 protein (LSR7), mRNA                       |
| NM_018694 | Homo sapiens HSVI binding protein (LOC55913), mRNA   |
| NM_018663 | Homo sapiens 22kDa peroxisomal membrane protein-like (LOC55895), mRNA                          |
| NM_018640 | Homo sapiens neuronal specific transcription factor DAT1 (LOC55885), mRNA                      |
| NM_018639 | Homo sapiens CS box-containing WD protein (LOC55884), mRNA                                     |
| NM_018449 | Homo sapiens AD-012 protein (LOC55833), mRNA   |
| NM_018658 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 16 (KCNJ16), mRNA      |
| NM_018671 | Homo sapiens hypothetical protein (IRO039700), mRNA  |
| NM_018439 | Homo sapiens hypothetical protein IMPACT (IMPACT), mRNA  |
| NM_017521 | Homo sapiens FEV protein (HSRNAFEV), mRNA  |
| NM_017526 | Homo sapiens leptin receptor gene-related protein (HSOBRGRP), mRNA                             |
| NM_017513 | Homo sapiens metaphase chromosome protein 1 (HSMCR30), mRNA                                    |
| NM_017532 | Homo sapiens p65 protein (HSAJ2425), mRNA  |
| NM_018682 | Homo sapiens hypothetical protein HDCMC04P (HDCMC04P), mRNA                                    |
| NM_018680 | Homo sapiens hypothetical protein HDCGC21P (HDCGC21P), mRNA                                    |
| NM_018428 | Homo sapiens hepatocellular carcinoma-associated antigen 66 (HCA66), mRNA                      |
| NM_017528 | Homo sapiens putative methyltransferase (HASJ4442), mRNA                                       |
| NM_017964 | Homo sapiens hypothetical protein FLJ20837 (FLJ20837), mRNA                                    |
| NM_017952 | Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA                                    |
| NM_017936 | Homo sapiens hypothetical protein FLJ20707 (FLJ20707), mRNA                                    |
| NM_017933 | Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA                                    |
| NM_017931 | Homo sapiens hypothetical protein FLJ20699 (FLJ20699), mRNA                                    |
| NM_017911 | Homo sapiens hypothetical protein FLJ20635 (FLJ20635), mRNA                                    |
| NM_017898 | Homo sapiens hypothetical protein FLJ20605 (FLJ20605), mRNA                                    |
| NM_017888 | Homo sapiens hypothetical protein FLJ20581 (FLJ20581), mRNA                                    |
| NM_017865 | Homo sapiens hypothetical protein FLJ20531 (FLJ20531), mRNA                                    |
| NM_017855 | Homo sapiens hypothetical protein FLJ20513 (FLJ20513), mRNA                                    |
| NM_017849 | Homo sapiens hypothetical protein FLJ20507 (FLJ20507), mRNA                                    |
| NM_017845 | Homo sapiens hypothetical protein FLJ20502 (FLJ20502), mRNA                                    |
| NM_017842 | Homo sapiens hypothetical protein FLJ20489 (FLJ20489), mRNA                                    |
| NM_017820 | Homo sapiens hypothetical protein FLJ20433 (FLJ20433), mRNA                                    |
| NM_017806 | Homo sapiens hypothetical protein FLJ20406 (FLJ20406), mRNA                                    |
| NM_017800 | Homo sapiens hypothetical protein FLJ20393 (FLJ20393), mRNA                                    |
| NM_017795 | Homo sapiens hypothetical protein FLJ20378 (FLJ20378), mRNA                                    |
| NM_017794 | Homo sapiens hypothetical protein FLJ20375 (FLJ20375), mRNA                                    |
| NM_017768 | Homo sapiens hypothetical protein FLJ20331 (FLJ20331), mRNA                                    |
| NM_017757 | Homo sapiens hypothetical protein FLJ20307 (FLJ20307), mRNA                                    |
| NM_017749 | Homo sapiens hypothetical protein FLJ20294 (FLJ20294), mRNA                                    |
| NM_017733 | Homo sapiens hypothetical protein FLJ20265 (FLJ20265), mRNA                                    |
| NM_017732 | Homo sapiens hypothetical protein FLJ20262 (FLJ20262), mRNA                                    |
| NM_017730 | Homo sapiens hypothetical protein FLJ20259 (FLJ20259), mRNA                                    |
| NM_017723 | Homo sapiens hypothetical protein FLJ20245 (FLJ20245), mRNA                                    |
| NM_017720 | Homo sapiens hypothetical protein FLJ20234 (FLJ20234), mRNA                                    |
| NM_017715 | Homo sapiens hypothetical protein FLJ20216 (FLJ20216), mRNA                                    |
| NM_017667 | Homo sapiens hypothetical protein FLJ20097 (FLJ20097), mRNA                                    |
| NM_017652 | Homo sapiens hypothetical protein FLJ20070 (FLJ20070), mRNA                                    |

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| NM_017635 | Homo sapiens hypothetical protein FLJ20039 (FLJ20039), mRNA           |
| NM_017632 | Homo sapiens hypothetical protein FLJ20036 (FLJ20036), mRNA           |
| NM_017624 | Homo sapiens hypothetical protein FLJ20019 (FLJ20019), mRNA           |
| NM_017623 | Homo sapiens hypothetical protein FLJ20018 (FLJ20018), mRNA           |
| NM_018390 | Homo sapiens hypothetical protein FLJ11323 (FLJ11323), mRNA           |
| NM_018382 | Homo sapiens hypothetical protein FLJ11292 (FLJ11292), mRNA           |
| NM_018337 | Homo sapiens hypothetical protein FLJ11137 (FLJ11137), mRNA           |
| NM_018320 | Homo sapiens hypothetical protein FLJ11099 (FLJ11099), mRNA           |
| NM_018317 | Homo sapiens hypothetical protein FLJ11082 (FLJ11082), mRNA           |
| NM_018301 | Homo sapiens hypothetical protein FLJ11016 (FLJ11016), mRNA           |
| NM_018295 | Homo sapiens hypothetical protein FLJ11000 (FLJ11000), mRNA           |
| NM_018291 | Homo sapiens hypothetical protein FLJ10986 (FLJ10986), mRNA           |
| NM_018290 | Homo sapiens hypothetical protein FLJ10983 (FLJ10983), mRNA           |
| NM_018280 | Homo sapiens hypothetical protein FLJ10945 (FLJ10945), mRNA           |
| NM_018266 | Homo sapiens hypothetical protein FLJ10902 (FLJ10902), mRNA           |
| NM_018263 | Homo sapiens hypothetical protein FLJ10898 (FLJ10898), mRNA           |
| NM_018249 | Homo sapiens hypothetical protein FLJ10867 (FLJ10867), mRNA           |
| NM_018233 | Homo sapiens hypothetical protein FLJ10826 (FLJ10826), mRNA           |
| NM_018202 | Homo sapiens hypothetical protein FLJ10747 (FLJ10747), mRNA           |
| NM_018194 | Homo sapiens hypothetical protein FLJ10724 (FLJ10724), mRNA           |
| NM_018191 | Homo sapiens hypothetical protein FLJ10716 (FLJ10716), mRNA           |
| NM_018134 | Homo sapiens hypothetical protein FLJ10547 (FLJ10547), mRNA           |
| NM_018131 | Homo sapiens hypothetical protein FLJ10540 (FLJ10540), mRNA           |
| NM_018124 | Homo sapiens hypothetical protein FLJ10520 (FLJ10520), mRNA           |
| NM_018114 | Homo sapiens hypothetical protein FLJ10496 (FLJ10496), mRNA           |
| NM_018107 | Homo sapiens hypothetical protein FLJ10482 (FLJ10482), mRNA           |
| NM_018098 | Homo sapiens hypothetical protein FLJ10461 (FLJ10461), mRNA           |
| NM_018085 | Homo sapiens hypothetical protein FLJ10402 (FLJ10402), mRNA           |
| NM_018079 | Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA           |
| NM_018063 | Homo sapiens hypothetical protein FLJ10339 (FLJ10339), mRNA           |
| NM_018062 | Homo sapiens hypothetical protein FLJ10335 (FLJ10335), mRNA           |
| NM_018059 | Homo sapiens hypothetical protein FLJ10324 (FLJ10324), mRNA           |
| NM_018053 | Homo sapiens hypothetical protein FLJ10307 (FLJ10307), mRNA           |
| NM_018046 | Homo sapiens hypothetical protein FLJ10283 (FLJ10283), mRNA           |
| NM_018006 | Homo sapiens hypothetical protein FLJ10140 (FLJ10140), mRNA           |
| NM_018004 | Homo sapiens hypothetical protein FLJ10134 (FLJ10134), mRNA           |
| NM_017999 | Homo sapiens hypothetical protein FLJ10111 (FLJ10111), mRNA           |
| NM_017992 | Homo sapiens hypothetical protein FLJ10083 (FLJ10083), mRNA           |
| NM_017991 | Homo sapiens hypothetical protein FLJ10081 (FLJ10081), mRNA           |
| NM_017979 | Homo sapiens hypothetical protein FLJ10043 (FLJ10043), mRNA           |
| NM_017975 | Homo sapiens hypothetical protein FLJ10036 (FLJ10036), mRNA           |
| NM_017973 | Homo sapiens hypothetical protein FLJ10034 (FLJ10034), mRNA           |
| NM_017610 | Homo sapiens hypothetical protein DKFZp761D081 (DKFZp761D081), mRNA   |
| NM_018457 | Homo sapiens DKFZp564J157 protein (DKFZp564J157), mRNA                |
| NM_017590 | Homo sapiens hypothetical protein DKFZp434K0920 (DKFZp434K0920), mRNA |
| NM_017566 | Homo sapiens hypothetical protein DKFZp434G0522 (DKFZp434G0522), mRNA |
| NM_017612 | Homo sapiens hypothetical protein DKFZp434E2220 (DKFZp434E2220), mRNA |
| NM_018641 | Homo sapiens chondroitin 4-O-sulfotransferase 2 (C4S-2), mRNA         |
| NM_018659 | Homo sapiens cytokine-like protein C17 (C17), mRNA                    |

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| NM_018656 | Homo sapiens bladder cancer overexpressed protein (BLOV1), mRNA  |
| NM_018702 | Homo sapiens double-stranded RNA specific adenosine deaminase (ADAR3), mRNA  |
| NM_014160 | Homo sapiens HSPC070 protein (HSPC070), mRNA   |
| NM_004288 | Homo sapiens pleckstrin homology, Sec7 and coiled/coil domains, binding protein (PSCDBP), mRNA                             |
| NM_004060 | Homo sapiens cyclin G1 (CCNG1), mRNA   |
| NM_006521 | Homo sapiens transcription factor binding to IGHM enhancer 3 (TFE3), mRNA  |
| NM_007035 | Homo sapiens keratocan (KERA), mRNA  |
| NM_000546 | Homo sapiens tumor protein p53 (Li-Fraumeni syndrome) (TP53), mRNA   |
| NM_003015 | Homo sapiens secreted frizzled-related protein 5 (SFRP5), mRNA   |
| NM_003012 | Homo sapiens secreted frizzled-related protein 1 (SFRP1), mRNA   |
| NM_017414 | Homo sapiens ubiquitin specific protease 18 (USP18), mRNA  |
| NM_016525 | Homo sapiens ubiquitin associated protein (UBAP), mRNA   |
| NM_017442 | Homo sapiens toll-like receptor 9 (TLR9), mRNA   |
| NM_016937 | Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA   |
| NM_016931 | Homo sapiens NADPH oxidase 4 (NOX4), mRNA  |
| NM_017433 | Homo sapiens myosin IIIA (MYO3A), mRNA   |
| NM_016946 | Homo sapiens junctional adhesion molecule (JAM), mRNA  |
| NM_005536 | Homo sapiens inositol(myo)-1(or 4)-monophosphatase 1 (IMPA1), mRNA   |
| NM_017410 | Homo sapiens homeo box C13 (HOXC13), mRNA  |
| NM_017409 | Homo sapiens homeo box C10 (HOXC10), mRNA  |
| NM_015922 | Homo sapiens NAD(P) dependent steroid dehydrogenase-like; H105e3 (H105E3), mRNA  |
| NM_004129 | Homo sapiens guanylate cyclase 1, soluble, beta 2 (GUCY1B2), mRNA  |
| NM_017423 | Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 7 (GalNAc-T7) (GALNT7), mRNA |
| NM_016947 | Homo sapiens G8 protein (G8), mRNA   |
| NM_017434 | Homo sapiens dual oxidase 1 (DUOX1), mRNA  |
| NM_012143 | Homo sapiens tuftelin-interacting protein (TIP39), mRNA  |
| NM_017418 | Homo sapiens deleted in esophageal cancer 1 (DEC1), mRNA   |
| NM_016929 | Homo sapiens chloride intracellular channel 5 (CLIC5), mRNA  |
| NM_017413 | Homo sapiens apelin; peptide ligand for APJ receptor (APELIN), mRNA  |
| NM_000477 | Homo sapiens albumin (ALB), mRNA   |
| NM_007235 | Homo sapiens exportin, tRNA (nuclear export receptor for tRNAs) (XPOT), mRNA   |
| NM_004585 | Homo sapiens retinoic acid receptor responder (tazarotene induced) 3 (RARRES3), mRNA                                       |
| NM_002134 | Homo sapiens heme oxygenase (decycling) 2 (HMOX2), mRNA  |
| NM_002100 | Homo sapiens glycophorin B (includes Ss blood group) (GYPB), mRNA  |
| NM_002099 | Homo sapiens glycophorin A (includes MN blood group) (GYPA), mRNA  |
| NM_005708 | Homo sapiens glypican 6 (GPC6), mRNA   |
| NM_013280 | Homo sapiens fibronectin leucine rich transmembrane protein 1 (FLRT1), mRNA  |
| NM_001304 | Homo sapiens carboxypeptidase D (CPD), mRNA  |
| NM_013410 | Homo sapiens adenylate kinase 3 (AK3), nuclear gene encoding mitochondrial protein, mRNA                                   |
| NM_002161 | Homo sapiens isoleucine-tRNA synthetase (IARS), transcript variant short, mRNA   |
| NM_013417 | Homo sapiens isoleucine-tRNA synthetase (IARS), transcript variant long, mRNA  |
| NM_015836 | Homo sapiens tryptophanyl tRNA synthetase 2 (mitochondrial) (WARS2), mRNA  |

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|           | nuclear gene encoding mitochondrial protein, mRNA  |
| NM_004992 | Homo sapiens methyl CpG binding protein 2 (Rett syndrome) (MECP2), mRNA                            |
| NM_003926 | Homo sapiens methyl-CpG binding domain protein 3 (MBD3), mRNA                                      |
| NM_006150 | Homo sapiens LIM domain only 6 (LMO6), mRNA  |
| NM_013431 | Homo sapiens killer cell lectin-like receptor subfamily C, member 4 (KLRC4), mRNA                  |
| NM_001427 | Homo sapiens engrailed homolog 2 (EN2), mRNA   |
| NM_001426 | Homo sapiens engrailed homolog 1 (EN1), mRNA   |
| NM_003445 | Homo sapiens zinc finger protein 155 (pHZ-96) (ZNF155), mRNA                                       |
| NM_016220 | Homo sapiens zinc finger protein (ZFD25) (ZFD25), mRNA   |
| NM_015855 | Homo sapiens Wilms tumor associated protein (WIT-1), mRNA  |
| NM_015873 | Homo sapiens villin-like (VILL), mRNA  |
| NM_016379 | Homo sapiens variable charge protein on X with eight repeats (VCX-8r), mRNA                        |
| NM_016378 | Homo sapiens variable charge protein on X with two repeats (VCX-2r), mRNA                          |
| NM_016437 | Homo sapiens tubulin, gamma 2 (TUBG2), mRNA  |
| NM_016575 | Homo sapiens TU12B1-TY protein (TU12B1-TY), mRNA   |
| NM_016089 | Homo sapiens KRAB-zinc finger protein SZF1-1 (SZF1), mRNA  |
| NM_013272 | Homo sapiens solute carrier family 21 (organic anion transporter), member 11 (SLC21A11), mRNA      |
| NM_015926 | Homo sapiens putative secreted protein (SIG11), mRNA   |
| NM_016224 | Homo sapiens SH3 and PX domain-containing protein SH3PX1 (SH3PX1), mRNA                            |
| NM_016276 | Homo sapiens serum/glucocorticoid regulated kinase 2 (SGK2), mRNA                                  |
| NM_015884 | Homo sapiens S2P protein (S2P), mRNA   |
| NM_016356 | Homo sapiens RU2S (RU2), mRNA  |
| NM_016321 | Homo sapiens Rh type C glycoprotein (RHCG), mRNA   |
| NM_015900 | Homo sapiens phosphatidylserine-specific phospholipase A1 alpha (PS-PLA1), mRNA                    |
| NM_016533 | Homo sapiens ninjurin 2 (NINJ2), mRNA  |
| NM_016641 | Homo sapiens membrane interacting protein of RGS16 (MIR16), mRNA                                   |
| NM_014319 | Homo sapiens integral inner nuclear membrane protein (MAN1), mRNA                                  |
| NM_016249 | Homo sapiens melanoma antigen, family E, 1, cancer/testis specific (MAGEE1), mRNA                  |
| NM_016153 | Homo sapiens LW-1 (LW-1), mRNA   |
| NM_016551 | Homo sapiens seven transmembrane protein TM7SF3 (TM7SF3), mRNA                                     |
| NM_016529 | Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA |
| NM_016432 | Homo sapiens synoretin (LOC51749), mRNA  |
| NM_016362 | Homo sapiens ghrelin precursor (LOC51738), mRNA  |
| NM_016270 | Homo sapiens Kruppel-like factor (LOC51713), mRNA  |
| NM_016243 | Homo sapiens cytochrome b5 reductase 1 (B5R.1) (LOC51706), mRNA                                    |
| NM_016231 | Homo sapiens nemo-like kinase (LOC51701), mRNA   |
| NM_016225 | Homo sapiens RhD type IIIa protein (LOC51698), mRNA  |
| NM_016219 | Homo sapiens alpha 1,2-mannosidase (LOC51697), mRNA  |
| NM_016217 | Homo sapiens hHDC for homolog of Drosophila headcase (LOC51696), mRNA                              |
| NM_016199 | Homo sapiens U6 snRNA-associated Sm-like protein LSm7 (LOC51690), mRNA                             |
| NM_016171 | Homo sapiens prothymosin a14 (LOC51685), mRNA  |
| NM_016447 | Homo sapiens MAGUK protein p55T; Protein Associated with Lins 2 (LOC51678), mRNA                   |
| NM_016126 | Homo sapiens HSPCO34 protein (LOC51668), mRNA  |
| NM_016118 | Homo sapiens NY-REN-18 antigen (LOC51667), mRNA  |

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| NM_016079 | Homo sapiens CGI-149 protein (LOC51652), mRNA  |
| NM_016062 | Homo sapiens CGI-128 protein (LOC51647), mRNA  |
| NM_016057 | Homo sapiens CGI-120 protein (LOC51644), mRNA  |
| NM_016056 | Homo sapiens CGI-119 protein (LOC51643), mRNA  |
| NM_016047 | Homo sapiens CGI-110 protein (LOC51639), mRNA  |
| NM_016016 | Homo sapiens CGI-69 protein (LOC51629), mRNA   |
| NM_016008 | Homo sapiens CGI-60 protein (LOC51626), mRNA   |
| NM_015995 | Homo sapiens Kruppel-like factor 13 (KLF13), mRNA  |
| NM_015980 | Homo sapiens HMP19 protein (LOC51617), mRNA  |
| NM_015958 | Homo sapiens CGI-30 protein (LOC51611), mRNA   |
| NM_015941 | Homo sapiens CGI-11 protein (LOC51606), mRNA   |
| NM_015937 | Homo sapiens CGI-06 protein (LOC51604), mRNA   |
| NM_015929 | Homo sapiens lipoyltransferase (LOC51601), mRNA  |
| NM_015921 | Homo sapiens divalent cation tolerant protein CUTA (LOC51596), mRNA  |
| NM_015908 | Homo sapiens arsenate resistance protein ARS2 (ARS2), mRNA   |
| NM_015875 | Homo sapiens unnamed HERV-H protein (LOC51581), mRNA   |
| NM_015874 | Homo sapiens H-2K binding factor-2 (LOC51580), mRNA  |
| NM_016283 | Homo sapiens adrenal gland protein AD-004 (LOC51578), mRNA   |
| NM_016644 | Homo sapiens mesenchymal stem cell protein DSC54 (LOC51334), mRNA  |
| NM_016643 | Homo sapiens mesenchymal stem cell protein DSC43 (LOC51333), mRNA  |
| NM_016642 | Homo sapiens beta V spectrin (BSPECV), mRNA  |
| NM_016638 | Homo sapiens SRp25 nuclear protein (LOC51329), mRNA  |
| NM_016637 | Homo sapiens ncaml (LOC51328), mRNA  |
| NM_016633 | Homo sapiens EDRF protein (LOC51327), mRNA   |
| NM_016625 | Homo sapiens hypothetical protein (LOC51319), mRNA   |
| NM_016622 | Homo sapiens hypothetical protein (LOC51318), mRNA   |
| NM_016621 | Homo sapiens hypothetical protein (LOC51317), mRNA   |
| NM_016609 | Homo sapiens hBOIT for potent brain type organic ion transporter (LOC51310), mRNA                                  |
| NM_016606 | Homo sapiens SGC32445 protein (LOC51308), mRNA   |
| NM_016591 | Homo sapiens core 2 beta-1,6-N-acetylglucosaminyltransferase 3 (LOC51301), mRNA                                    |
| NM_016585 | Homo sapiens testicular haploid expressed gene (THEG), mRNA  |
| NM_016573 | Homo sapiens Gem-interacting protein (LOC51291), mRNA  |
| NM_016568 | Homo sapiens G-protein coupled receptor SALPR; somatostatin and angiotensin-like peptide receptor (LOC51289), mRNA |
| NM_016566 | Homo sapiens pparl (LOC51288), mRNA  |
| NM_016563 | Homo sapiens Ris (LOC51285), mRNA  |
| NM_016548 | Homo sapiens golgi membrane protein GP73 (LOC51280), mRNA  |
| NM_016499 | Homo sapiens hypothetical protein (LOC51259), mRNA   |
| NM_016490 | Homo sapiens hypothetical protein (LOC51252), mRNA   |
| NM_016466 | Homo sapiens hypothetical protein (LOC51239), mRNA   |
| NM_016459 | Homo sapiens hypothetical protein (LOC51237), mRNA   |
| NM_016449 | Homo sapiens hypothetical protein (LOC51233), mRNA   |
| NM_016440 | Homo sapiens VRK3 for vaccinia related kinase 3 (LOC51231), mRNA   |
| NM_016427 | Homo sapiens transcription elongation factor (SIII) elongin A2 (TCEB3L), mRNA                                      |
| NM_016423 | Homo sapiens zinc finger protein 219 (ZNF219), mRNA  |
| NM_016361 | Homo sapiens LPAP for lysophosphatidic acid phosphatase (LOC51205), mRNA   |
| NM_016353 | Homo sapiens rec (LOC51201), mRNA  |
| NM_016349 | Homo sapiens susceptibility protein NSG-x (LOC51198), mRNA   |

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| NM_016341 | Homo sapiens pancreas-enriched phospholipase C (LOC51196), mRNA                         |
| NM_016323 | Homo sapiens cyclin-E binding protein 1 (LOC51191), mRNA                                |
| NM_016317 | Homo sapiens neutral sphingomyelinase (LOC51190), mRNA                                  |
| NM_016286 | Homo sapiens carbonyl reductase (LOC51181), mRNA  |
| NM_016269 | Homo sapiens lymphoid enhancer binding factor-1 (LOC51176), mRNA                        |
| NM_016245 | Homo sapiens retinal short-chain dehydrogenase/reductase retSDR2 (LOC51170), mRNA       |
| NM_016241 | Homo sapiens endomucin-1 (LOC51169), mRNA   |
| NM_016230 | Homo sapiens flavohemoprotein b5+b5R (LOC51167), mRNA                                   |
| NM_016221 | Homo sapiens dynactin p62 subunit (LOC51164), mRNA                                      |
| NM_016215 | Homo sapiens NEU1 protein (LOC51162), mRNA  |
| NM_016210 | Homo sapiens g20 protein (LOC51161), mRNA   |
| NM_016161 | Homo sapiens alpha-1,4-N-acetylglucosaminyltransferase (LOC51146), mRNA                 |
| NM_016123 | Homo sapiens putative protein kinase NY-REN-64 antigen (LOC51135), mRNA                 |
| NM_016120 | Homo sapiens putative ring zinc finger protein NY-REN-43 antigen (LOC51132), mRNA       |
| NM_016033 | Homo sapiens CGI-90 protein (LOC51115), mRNA  |
| NM_016032 | Homo sapiens CGI-89 protein (LOC51114), mRNA  |
| NM_016030 | Homo sapiens CGI-87 protein (LOC51112), mRNA  |
| NM_016028 | Homo sapiens CGI-85 protein (LOC51111), mRNA  |
| NM_016027 | Homo sapiens CGI-83 protein (LOC51110), mRNA  |
| NM_016022 | Homo sapiens CGI-78 protein (LOC51107), mRNA  |
| NM_016018 | Homo sapiens CGI-72 protein (LOC51105), mRNA  |
| NM_016013 | Homo sapiens CGI-65 protein (LOC51103), mRNA  |
| NM_016011 | Homo sapiens CGI-63 protein (LOC51102), mRNA  |
| NM_016006 | Homo sapiens CGI-58 protein (LOC51099), mRNA  |
| NM_015999 | Homo sapiens CGI-45 protein (LOC51094), mRNA  |
| NM_015982 | Homo sapiens germ cell specific Y-box binding protein (LOC51087), mRNA                  |
| NM_015963 | Homo sapiens CGI-36 protein (LOC51078), mRNA  |
| NM_015959 | Homo sapiens CGI-31 protein (LOC51075), mRNA  |
| NM_015950 | Homo sapiens CGI-22 protein (LOC51069), mRNA  |
| NM_015938 | Homo sapiens CGI-07 protein (LOC51068), mRNA  |
| NM_015916 | Homo sapiens hypothetical protein (LOC51063), mRNA                                      |
| NM_015914 | Homo sapiens hypothetical protein (LOC51061), mRNA                                      |
| NM_015910 | Homo sapiens hypothetical protein (LOC51057), mRNA                                      |
| NM_015901 | Homo sapiens unknown (LOC51055), mRNA   |
| NM_015893 | Homo sapiens preprolactin-releasing peptide (LOC51052), mRNA                            |
| NM_015887 | Homo sapiens putative peroxisome microbody protein 175.1 (LOC51051), mRNA               |
| NM_015880 | Homo sapiens RIG-like 14-1 (LOC51047), mRNA   |
| NM_015877 | Homo sapiens Kruppel-associated box protein (LOC51045), mRNA                            |
| NM_015863 | Homo sapiens surfactant protein B (LOC51041), mRNA                                      |
| NM_015854 | Homo sapiens retinoic acid receptor-beta associated open reading frame (LOC51036), mRNA |
| NM_015849 | Homo sapiens pancreatic elastase IIB (LOC51032), mRNA                                   |
| NM_016075 | Homo sapiens CGI-145 protein (LOC51028), mRNA   |
| NM_016074 | Homo sapiens CGI-143 protein (LOC51027), mRNA   |
| NM_016063 | Homo sapiens CGI-130 protein (LOC51020), mRNA   |
| NM_016048 | Homo sapiens CGI-111 protein (LOC51015), mRNA   |
| NM_016044 | Homo sapiens CGI-105 protein (LOC51011), mRNA   |
| NM_015947 | Homo sapiens CGI-18 protein (LOC51008), mRNA  |
| NM_016058 | Homo sapiens CGI-121 protein (LOC51002), mRNA   |

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| NM_015948 | Homo sapiens CGI-19 protein (LOC51000), mRNA   |
| NM_016040 | Homo sapiens CGI-100 protein (LOC50999), mRNA  |
| NM_016571 | Homo sapiens lengsin (LGS), mRNA   |
| NM_015868 | Homo sapiens NK-receptor (KIR-023GB), mRNA   |
| NM_016281 | Homo sapiens STE20-like kinase (JIK), mRNA   |
| NM_016358 | Homo sapiens iroquois homeobox protein 4 (IRX4), mRNA  |
| NM_016291 | Homo sapiens mammalian inositol hexakisphosphate kinase 2 (IP6K2), mRNA  |
| NM_015848 | Homo sapiens cytokeratin 2 (HUMCYT2A), mRNA  |
| NM_016506 | Homo sapiens hypothetical protein (HSPC252), mRNA  |
| NM_016498 | Homo sapiens hypothetical protein (HSPC242), mRNA  |
| NM_016460 | Homo sapiens hypothetical protein (HSPC192), mRNA  |
| NM_016390 | Homo sapiens hypothetical protein (HSPC109), mRNA  |
| NM_016091 | Homo sapiens HSPC025 (HSPC025), mRNA   |
| NM_016522 | Homo sapiens neurotrimin (HNT), mRNA   |
| NM_016258 | Homo sapiens high-glucose-regulated protein 8 (HGRG8), mRNA  |
| NM_016173 | Homo sapiens HEMK homolog 7kb (HEMK), mRNA   |
| NM_016516 | Homo sapiens tumor antigen SLP-8p (HCC8), mRNA   |
| NM_016540 | Homo sapiens G protein-coupled receptor 72 (GPR72), mRNA   |
| NM_012196 | Homo sapiens G antigen 8 (GAGE8), mRNA   |
| NM_015898 | Homo sapiens HIV-1 inducer of short transcripts binding protein (FB11), mRNA   |
| NM_016357 | Homo sapiens epithelial protein lost in neoplasm beta (EPLIN), mRNA  |
| NM_016218 | Homo sapiens polymerase (DNA-directed) kappa (POLK), mRNA  |
| NM_016240 | Homo sapiens CSR1 protein (CSR1), mRNA   |
| NM_016073 | Homo sapiens CGI-142 (CGI-142), mRNA   |
| NM_016315 | Homo sapiens CED-6 protein (CED-6), mRNA   |
| NM_016620 | Homo sapiens hypothetical protein (BM-005), mRNA   |
| NM_015896 | Homo sapiens BLu protein (BLu), mRNA   |
| NM_016426 | Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA   |
| NM_015928 | Homo sapiens androgen-induced prostate proliferative shutoff associated protein (AS3), mRNA  |
| NM_016238 | Homo sapiens anaphase-promoting complex subunit 7 (APC7), mRNA   |
| NM_016376 | Homo sapiens ANKHZN protein (ANKHZN), mRNA   |
| NM_016282 | Homo sapiens adenylate kinase 3 alpha like (AKL3L), mRNA   |
| NM_016453 | Homo sapiens SH3 protein (AF3P21), mRNA  |
| NM_016614 | Homo sapiens TRAF and TNF receptor-associated protein (AD022), mRNA  |
| NM_015365 | Homo sapiens Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region, gene 1 (AMMECR1), mRNA |
| NM_007126 | Homo sapiens valosin-containing protein (VCP), mRNA  |
| NM_001059 | Homo sapiens tachykinin receptor 3 (TACR3), mRNA   |
| NM_005963 | Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA  |
| NM_005561 | Homo sapiens lysosomal-associated membrane protein 1 (LAMP1), mRNA   |
| NM_006407 | Homo sapiens vitamin A responsive; cytoskeleton related (JWA), mRNA  |
| NM_000854 | Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA   |
| NM_002046 | Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA   |
| NM_001953 | Homo sapiens endothelial cell growth factor 1 (platelet-derived) (ECGF1), mRNA   |
| NM_000927 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 1 (ABCB1), mRNA  |
| NM_015686 | Homo sapiens TED protein (TED), mRNA   |
| NM_014070 | Homo sapiens STG protein (STG), mRNA   |
| NM_014069 | Homo sapiens SPR1 protein (SPR1), mRNA   |



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| NM_014068 | Homo sapiens SEEK1 protein (SEEK1), mRNA  |
| NM_014051 | Homo sapiens PTD011 protein (PTD011), mRNA  |
| NM_014109 | Homo sapiens PRO2000 protein (PRO2000), mRNA  |
| NM_014107 | Homo sapiens PRO1992 protein (PRO1992), mRNA  |
| NM_014095 | Homo sapiens PRO1600 protein (PRO1600), mRNA  |
| NM_014084 | Homo sapiens PRO0806 protein (PRO0806), mRNA  |
| NM_014130 | Homo sapiens PRO0483 protein (PRO0483), mRNA  |
| NM_014082 | Homo sapiens PRO0397 protein (PRO0397), mRNA  |
| NM_014125 | Homo sapiens PRO0327 protein (PRO0327), mRNA  |
| NM_014081 | Homo sapiens PRO0297 protein (PRO0297), mRNA  |
| NM_014037 | Homo sapiens NTT5 protein (NTT5), mRNA  |
| NM_015367 | Homo sapiens MIL1 protein (MIL1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_014060 | Homo sapiens MCT-1 protein (MCT-1), mRNA  |
| NM_014892 | Homo sapiens KIAA1116 protein (KIAA1116), mRNA                                      |
| NM_014968 | Homo sapiens KIAA1104 protein (KIAA1104), mRNA                                      |
| NM_014915 | Homo sapiens KIAA1074 protein (KIAA1074), mRNA                                      |
| NM_014911 | Homo sapiens KIAA1048 protein (KIAA1048), mRNA                                      |
| NM_014965 | Homo sapiens KIAA1042 protein (KIAA1042), mRNA                                      |
| NM_014947 | Homo sapiens KIAA1041 protein (KIAA1041), mRNA                                      |
| NM_014923 | Homo sapiens KIAA0970 protein (KIAA0970), mRNA                                      |
| NM_015310 | Homo sapiens KIAA0942 protein (KIAA0942), mRNA                                      |
| NM_015057 | Homo sapiens KIAA0916 protein (KIAA0916), mRNA                                      |
| NM_014944 | Homo sapiens KIAA0911 protein (KIAA0911), mRNA                                      |
| NM_014961 | Homo sapiens KIAA0871 protein (KIAA0871), mRNA                                      |
| NM_014941 | Homo sapiens KIAA0852 protein (KIAA0852), mRNA                                      |
| NM_015376 | Homo sapiens KIAA0846 protein (KIAA0846), mRNA                                      |
| NM_014715 | Homo sapiens KIAA0712 gene product (KIAA0712), mRNA                                 |
| NM_014871 | Homo sapiens KIAA0710 gene product (KIAA0710), mRNA                                 |
| NM_014799 | Homo sapiens hephaestin (HEPH), mRNA  |
| NM_014678 | Homo sapiens KIAA0685 gene product (KIAA0685), mRNA                                 |
| NM_014011 | Homo sapiens KIAA0671 gene product (KIAA0671), mRNA                                 |
| NM_014741 | Homo sapiens KIAA0652 gene product (KIAA0652), mRNA                                 |
| NM_014662 | Homo sapiens KIAA0645 gene product (KIAA0645), mRNA                                 |
| NM_014838 | Homo sapiens KIAA0637 gene product (KIAA0637), mRNA                                 |
| NM_014774 | Homo sapiens KIAA0494 gene product (KIAA0494), mRNA                                 |
| NM_014870 | Homo sapiens KIAA0478 gene product (KIAA0478), mRNA                                 |
| NM_014856 | Homo sapiens KIAA0476 gene product (KIAA0476), mRNA                                 |
| NM_014864 | Homo sapiens KIAA0475 gene product (KIAA0475), mRNA                                 |
| NM_014857 | Homo sapiens KIAA0471 gene product (KIAA0471), mRNA                                 |
| NM_014812 | Homo sapiens KIAA0470 gene product (KIAA0470), mRNA                                 |
| NM_014826 | Homo sapiens KIAA0451 gene product (KIAA0451), mRNA                                 |
| NM_014675 | Homo sapiens KIAA0445 gene product (KIAA0445), mRNA                                 |
| NM_014751 | Homo sapiens KIAA0429 gene product (KIAA0429), mRNA                                 |
| NM_014724 | Homo sapiens KIAA0426 gene product (KIAA0426), mRNA                                 |
| NM_014684 | Homo sapiens KIAA0373 gene product (KIAA0373), mRNA                                 |
| NM_014809 | Homo sapiens KIAA0319 gene product (KIAA0319), mRNA                                 |
| NM_014727 | Homo sapiens KIAA0304 gene product (KIAA0304), mRNA                                 |
| NM_014807 | Homo sapiens KIAA0285 gene product (KIAA0285), mRNA                                 |
| NM_014767 | Homo sapiens KIAA0275 gene product (KIAA0275), mRNA                                 |
| NM_014785 | Homo sapiens KIAA0258 gene product (KIAA0258), mRNA                                 |

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| NM_015153 | Homo sapiens KIAA0244 protein (KIAA0244), mRNA   |
| NM_014747 | Homo sapiens KIAA0237 gene product (KIAA0237), mRNA                                    |
| NM_014873 | Homo sapiens KIAA0205 gene product (KIAA0205), mRNA                                    |
| NM_014846 | Homo sapiens KIAA0196 gene product (KIAA0196), mRNA                                    |
| NM_014738 | Homo sapiens KIAA0195 gene product (KIAA0195), mRNA                                    |
| NM_014640 | Homo sapiens KIAA0173 gene product (KIAA0173), mRNA                                    |
| NM_014666 | Homo sapiens KIAA0171 gene product (KIAA0171), mRNA                                    |
| NM_014641 | Homo sapiens KIAA0170 gene product (KIAA0170), mRNA                                    |
| NM_014737 | Homo sapiens Ras association (RalGDS/AF-6) domain family 2 (RASSF2), mRNA              |
| NM_014770 | Homo sapiens KIAA0167 gene product (KIAA0167), mRNA                                    |
| NM_014739 | Homo sapiens KIAA0164 gene product (KIAA0164), mRNA                                    |
| NM_014865 | Homo sapiens chromosome condensation-related SMC-associated protein 1 (KIAA0159), mRNA |
| NM_014748 | Homo sapiens KIAA0064 gene product (KIAA0064), mRNA                                    |
| NM_014876 | Homo sapiens KIAA0063 gene product (KIAA0063), mRNA                                    |
| NM_014764 | Homo sapiens DAZ associated protein 2 (DAZAP2), mRNA                                   |
| NM_014875 | Homo sapiens KIAA0042 gene product (KIAA0042), mRNA                                    |
| NM_014642 | Homo sapiens KIAA0036 gene product (KIAA0036), mRNA                                    |
| NM_015340 | Homo sapiens leucyl-tRNA synthetase, mitochondrial (KIAA0028), mRNA                    |
| NM_014634 | Homo sapiens KIAA0015 gene product (KIAA0015), mRNA                                    |
| NM_014783 | Homo sapiens KIAA0013 gene product (KIAA0013), mRNA                                    |
| NM_014008 | Homo sapiens JM1 protein (JM1), mRNA   |
| NM_014066 | Homo sapiens HT002 protein; hypertension-related calcium-regulated gene (HT002), mRNA  |
| NM_014154 | Homo sapiens HSPC056 protein (HSPC056), mRNA   |
| NM_014153 | Homo sapiens HSPC055 protein (HSPC055), mRNA   |
| NM_014150 | Homo sapiens HSPC052 protein (HSPC052), mRNA   |
| NM_014149 | Homo sapiens HSPC049 protein (HSPC049), mRNA   |
| NM_014029 | Homo sapiens HSPC022 protein (HSPC022), mRNA   |
| NM_014027 | Homo sapiens HSPC018 protein (HSPC018), mRNA   |
| NM_014019 | Homo sapiens HSPC009 protein (HSPC009), mRNA   |
| NM_015372 | Homo sapiens hypothetical protein (HSN44A4A), mRNA                                     |
| NM_015343 | Homo sapiens hypothetical protein (HSA011916), mRNA                                    |
| NM_014063 | Homo sapiens src homology 3 domain-containing protein HIP-55 (HIP-55), mRNA            |
| NM_014052 | Homo sapiens GW128 protein (GW128), mRNA   |
| NM_014888 | Homo sapiens predicted osteoblast protein (GS3786), mRNA                               |
| NM_014030 | Homo sapiens G protein-coupled receptor kinase-interactor 1 (GIT1), mRNA               |
| NM_014077 | Homo sapiens DKFZP586O0120 protein (DKFZP586O0120), mRNA                               |
| NM_015425 | Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA                               |
| NM_015456 | Homo sapiens DKFZP586B0519 protein (DKFZP586B0519), mRNA                               |
| NM_015393 | Homo sapiens DKFZP564O0823 protein (DKFZP564O0823), mRNA                               |
| NM_015421 | Homo sapiens DKFZP564K2062 protein (DKFZP564K2062), mRNA                               |
| NM_015415 | Homo sapiens DKFZP564B167 protein (DKFZP564B167), mRNA                                 |
| NM_015527 | Homo sapiens DKFZP434P1750 protein (DKFZP434P1750), mRNA                               |
| NM_015458 | Homo sapiens DKFZP434K171 protein (DKFZP434K171), mRNA                                 |
| NM_015599 | Homo sapiens N-acetylglucosamine-phosphate mutase (AGM1), mRNA                         |
| NM_015434 | Homo sapiens DKFZP434B168 protein (DKFZP434B168), mRNA                                 |
| NM_015699 | Homo sapiens hypothetical protein (DJ159A19.3), mRNA                                   |
| NM_015697 | Homo sapiens hypothetical protein (CL640), mRNA  |
| NM_015702 | Homo sapiens hypothetical protein (CL25022), mRNA                                      |

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| NM_015703 | Homo sapiens CGI-96 protein (CGI-96), mRNA   |
| NM_015380 | Homo sapiens CGI-51 protein (CGI-51), mRNA   |
| NM_014143 | Homo sapiens B7-H1 protein (B7-H1), mRNA   |
| NM_014062 | Homo sapiens ART-4 protein (ART-4), mRNA   |
| NM_014596 | Homo sapiens zinc ribbon domain containing, 1 (ZNRD1), mRNA  |
| NM_014519 | Homo sapiens zinc finger protein 232 (ZNF232), mRNA  |
| NM_014437 | Homo sapiens zinc/iron regulated transporter-like (ZIRTL), mRNA  |
| NM_015363 | Homo sapiens zinc finger, imprinted 2 (ZIM2), mRNA   |
| NM_014232 | Homo sapiens vesicle-associated membrane protein 2 (synaptobrevin 2) (VAMP2), mRNA   |
| NM_014233 | Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA  |
| NM_014235 | Homo sapiens ubiquitin-like 4 (UBL4), mRNA   |
| NM_014383 | Homo sapiens testis zinc finger protein (TZFP), mRNA   |
| NM_014547 | Homo sapiens tropomodulin 3 (ubiquitous) (TMOD3), mRNA   |
| NM_014548 | Homo sapiens tropomodulin 2 (neuronal) (TMOD2), mRNA   |
| NM_014464 | Homo sapiens tubulointerstitial nephritis antigen (TIN-AG), mRNA   |
| NM_014258 | Homo sapiens synaptonemal complex protein 2 (SYCP2), mRNA  |
| NM_014370 | Homo sapiens serine/threonine kinase 23 (STK23), mRNA  |
| NM_014264 | Homo sapiens serine/threonine kinase 18 (STK18), mRNA  |
| NM_014467 | Homo sapiens sushi-repeat protein (SRPUL), mRNA  |
| NM_014230 | Homo sapiens signal recognition particle 68kD (SRP68), mRNA  |
| NM_014320 | Homo sapiens putative heme-binding protein (SOUL), mRNA  |
| NM_014426 | Homo sapiens sorting nexin 5 (SNX5), mRNA  |
| NM_014311 | Homo sapiens single-strand selective monofunctional uracil DNA glycosylase (SMUG1), mRNA   |
| NM_014270 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 9 (SLC7A9), mRNA                                       |
| NM_014252 | Homo sapiens solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 15 (SLC25A15), nuclear gene encoding mitochondrial protein, mRNA |
| NM_014251 | Homo sapiens solute carrier family 25, member 13 (citrin) (SLC25A13), mRNA   |
| NM_014442 | Homo sapiens sialic acid binding Ig-like lectin 8 (SIGLEC8), mRNA  |
| NM_014521 | Homo sapiens SH3-domain binding protein 4 (SH3BP4), mRNA   |
| NM_014554 | Homo sapiens sentrin/SUMO-specific protease (SENP1), mRNA  |
| NM_014563 | Homo sapiens spondyloepiphyseal dysplasia, late (SEDL), mRNA   |
| NM_014191 | Homo sapiens sodium channel, voltage gated, type VIII, alpha polypeptide (SCN8A), mRNA   |
| NM_014139 | Homo sapiens sodium channel, voltage-gated, type XII, alpha polypeptide (SCN12A), mRNA   |
| NM_014363 | Homo sapiens spastic ataxia of Charlevoix-Saguenay (sacsin) (SACS), mRNA   |
| NM_014285 | Homo sapiens homolog of Yeast RRP4 (ribosomal RNA processing 4), 3'-5'-exoribonuclease (RRP4), mRNA  |
| NM_014496 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 6 (RPS6KA6), mRNA  |
| NM_014245 | Homo sapiens ring finger protein 7 (RNF7), mRNA  |
| NM_014372 | Homo sapiens ring finger protein 11 (RNF11), mRNA  |
| NM_014314 | Homo sapiens RNA helicase (RIG-I), mRNA  |
| NM_014470 | Homo sapiens GTP-binding protein (RHO6), mRNA  |
| NM_014248 | Homo sapiens ring-box 1 (RBX1), mRNA   |
| NM_014226 | Homo sapiens renal tumor antigen (RAGE), mRNA  |
| NM_014488 | Homo sapiens RAB30, member RAS oncogene family (RAB30), mRNA   |

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| NM_014353 | Homo sapiens RAB26, member RAS oncogene family (RAB26), mRNA  |
| NM_014410 | Homo sapiens clusterin-like 1 (retinal) (CLUL1), mRNA   |
| NM_015725 | Homo sapiens photoreceptor outer segment all-trans retinol dehydrogenase (PRRDH), mRNA                          |
| NM_005973 | Homo sapiens papillary renal cell carcinoma (translocation-associated) (PRCC), mRNA                             |
| NM_014337 | Homo sapiens peptidylprolyl isomerase (cyclophilin)-like 2 (PPIL2), mRNA  |
| NM_014348 | Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA                              |
| NM_015720 | Homo sapiens endoglycan (PODLX2), mRNA  |
| NM_014386 | Homo sapiens polycystic kidney disease 2-like 2 (PKD2L2), mRNA  |
| NM_014390 | Homo sapiens EBNA-2 co-activator (100kD) (p100), mRNA   |
| NM_014321 | Homo sapiens origin recognition complex, subunit 6 (yeast homolog)-like (ORC6L), mRNA                           |
| NM_014566 | Homo sapiens olfactory receptor, family 1, subfamily D, member 5 (OR1D5), mRNA                                  |
| NM_014565 | Homo sapiens olfactory receptor, family 1, subfamily A, member 1 (OR1A1), mRNA                                  |
| NM_014352 | Homo sapiens POU transcription factor (OCT11), mRNA   |
| NM_014581 | Homo sapiens odorant-binding protein 2B (OBP2B), mRNA   |
| NM_014582 | Homo sapiens odorant-binding protein 2A (OBP2A), mRNA   |
| NM_014142 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 5 (NUDT5), mRNA                          |
| NM_014502 | Homo sapiens nuclear matrix protein NMP200 related to splicing factor PRP19 (NMP200), mRNA                      |
| NM_014328 | Homo sapiens nesca protein (NESCA), mRNA  |
| NM_014222 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8 (19kD, PGIV) (NDUFA8), mRNA                  |
| NM_015678 | Homo sapiens neurobeachin (NBEA), mRNA  |
| NM_014461 | Homo sapiens contactin 6 (CNTN6), mRNA  |
| NM_014520 | Homo sapiens MYB binding protein (P160) 1a (MYBBP1A), mRNA  |
| NM_014221 | Homo sapiens mature T-cell proliferation 1 (MTCPI), mRNA  |
| NM_005927 | Homo sapiens microfibrillar-associated protein 3 (MFAP3), mRNA  |
| NM_014623 | Homo sapiens male-enhanced antigen (MEA), mRNA  |
| NM_014462 | Homo sapiens Lsm1 protein (LSM1), mRNA  |
| NM_014622 | Homo sapiens loss of heterozygosity, 11, chromosomal region 2, gene A (LOH11CR2A), mRNA                         |
| NM_014240 | Homo sapiens LIM domains containing 1 (LIMD1), mRNA   |
| NM_014564 | Homo sapiens LIM homeobox protein 3 (LHX3), mRNA  |
| NM_014553 | Homo sapiens LBP protein (LBP-9), mRNA  |
| NM_014387 | Homo sapiens linker for activation of T cells (LAT), mRNA   |
| NM_014379 | Homo sapiens neuronal potassium channel alpha subunit (KV8.1), mRNA   |
| NM_014514 | Homo sapiens killer cell immunoglobulin-like receptor, three domains, short cytoplasmic tail, 1 (KIR3DS1), mRNA |
| NM_014513 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 5 (KIR2DS5), mRNA   |
| NM_014512 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 1 (KIR2DS1), mRNA   |
| NM_014511 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 3 (KIR2DL3), mRNA    |
| NM_014219 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 2 (KIR2DL2), mRNA    |

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| NM_014218 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1 (KIR2DL1), mRNA        |
| NM_014765 | Homo sapiens translocase of outer mitochondrial membrane 20 (yeast) homolog (KIAA0016), mRNA                        |
| NM_014406 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCNMB3L), mRNA |
| NM_014407 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M beta member 3 (KCNMB3), mRNA        |
| NM_014216 | Homo sapiens inositol 1,3,4-triphosphate 5/6 kinase (ITPK1), mRNA   |
| NM_014425 | Homo sapiens inversin (INVS), mRNA  |
| NM_014214 | Homo sapiens inositol(myo)-1(or 4)-monophosphatase 2 (IMPA2), mRNA  |
| NM_014271 | Homo sapiens interleukin 1 receptor accessory protein-like 1 (IL1RAPL1), mRNA                                       |
| NM_014339 | Homo sapiens interleukin 17 receptor (IL17R), mRNA  |
| NM_014443 | Homo sapiens interleukin 17B (IL17B), mRNA  |
| NM_014333 | Homo sapiens immunoglobulin superfamily, member 4 (IGSF4), mRNA   |
| NM_014262 | Homo sapiens hypothetical protein B (HSU47926), mRNA  |
| NM_014424 | Homo sapiens heat shock 27kD protein family, member 7 (cardiovascular) (HSPB7), mRNA                                |
| NM_014473 | Homo sapiens putative dimethyladenosine transferase (HSA9761), mRNA   |
| NM_015370 | Homo sapiens hypothetical protein (HS747E2A), mRNA  |
| NM_015371 | Homo sapiens hypothetical protein (HS322B1A), mRNA  |
| NM_014345 | Homo sapiens endocrine regulator (HRIHFB2436), mRNA   |
| NM_014255 | Homo sapiens transmembrane protein 4 (TMEM4), mRNA  |
| NM_014257 | Homo sapiens CD209 antigen-like (CD209L), mRNA  |
| NM_014213 | Homo sapiens homeo box D9 (HOXD9), mRNA   |
| NM_014620 | Homo sapiens homeo box C4 (HOXC4), mRNA   |
| NM_014212 | Homo sapiens homeo box C11 (HOXC11), mRNA   |
| NM_014260 | Homo sapiens HLA class II region expressed gene KE2 (HKE2), mRNA  |
| NM_014356 | Homo sapiens HGC6.2 protein (HGC6.2), mRNA  |
| NM_014354 | Homo sapiens HGC6.1.1 protein (HGC6.1.1), mRNA  |
| NM_014571 | Homo sapiens hairy/enhancer-of-split related with YRPW motif-like (HEYL), mRNA                                      |
| NM_014606 | Homo sapiens hect domain and RLD 3 (HERC3), mRNA  |
| NM_015726 | Homo sapiens H326 (H326), mRNA  |
| NM_014619 | Homo sapiens glutamate receptor, ionotropic, kainate 4 (GRIK4), mRNA  |
| NM_014626 | Homo sapiens G protein-coupled receptor 58 (GPR58), mRNA  |
| NM_014627 | Homo sapiens G protein-coupled receptor 57 (GPR57), mRNA  |
| NM_014498 | Homo sapiens type II Golgi membrane protein (GPP130), mRNA  |
| NM_014373 | Homo sapiens putative G protein-coupled receptor (GPCR150), mRNA  |
| NM_014236 | Homo sapiens glyceronephosphate O-acyltransferase (GNPAT), mRNA   |
| NM_015710 | Homo sapiens glioma tumor suppressor candidate region gene 2 (GLTSCR2), mRNA  |
| NM_015711 | Homo sapiens glioma tumor suppressor candidate region gene 1 (GLTSCR1), mRNA  |
| NM_015715 | Homo sapiens group III secreted phospholipase A2 (GIII-SPLA2), mRNA   |
| NM_014291 | Homo sapiens glycine C-acetyltransferase (2-amino-3-ketobutyrate coenzyme A ligase) (GCAT), mRNA                    |
| NM_014364 | Homo sapiens glyceraldehyde-3-phosphate dehydrogenase, testis-specific (GAPDS), mRNA                                |
| NM_015714 | Homo sapiens putative lymphocyte G0/G1 switch gene (G0S2), mRNA   |
| NM_014489 | Homo sapiens FGF receptor activating protein 1 (FRAG1), mRNA  |

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| NM_014585 | Homo sapiens solute carrier family 11 (proton-coupled divalent metal ion transporters), member 3 (SLC11A3), mRNA          |
| NM_014344 | Homo sapiens putative secreted ligand homologous to fix1 (FJX1), mRNA   |
| NM_014439 | Homo sapiens Interleukin-1 Superfamily z (FIL1(ZETA)), mRNA   |
| NM_014440 | Homo sapiens Interleukin-1 Superfamily 1 (FIL1(EPSILON)), mRNA  |
| NM_014438 | Homo sapiens Interleukin-1 Superfamily e (FIL1), mRNA   |
| NM_014210 | Homo sapiens ecotropic viral integration site 2A (EVI2A), mRNA  |
| NM_014355 | Homo sapiens enolase alpha, lung-specific (ENO1B), mRNA   |
| NM_014600 | Homo sapiens EH-domain containing 3 (EHD3), mRNA  |
| NM_014601 | Homo sapiens EH-domain containing 2 (EHD2), mRNA  |
| NM_014503 | Homo sapiens down-regulated in metastasis (DRIM), mRNA  |
| NM_014549 | Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA  |
| NM_014388 | Homo sapiens novel putative protein similar to YIL091C yeast hypothetical 84 kD protein from SGA1-KTR7 (DJ434O14.5), mRNA |
| NM_014618 | Homo sapiens deleted in bladder cancer chromosome region candidate 1 (DBCCR1), mRNA                                       |
| NM_014392 | Homo sapiens neuron-specific protein (D4S234E), mRNA  |
| NM_004389 | Homo sapiens catenin (cadherin-associated protein), alpha 2 (CTNNA2), mRNA  |
| NM_014343 | Homo sapiens claudin 15 (CLDN15), mRNA  |
| NM_014887 | Homo sapiens hypothetical protein from BCRA2 region (CG005), mRNA   |
| NM_014207 | Homo sapiens CD5 antigen (p56-62) (CD5), mRNA   |
| NM_014335 | Homo sapiens chromosome 15 open reading frame 3 (C15ORF3), mRNA   |
| NM_014206 | Homo sapiens chromosome 11 open reading frame 10 (C11orf10), mRNA   |
| NM_014453 | Homo sapiens putative breast adenocarcinoma marker (32kD) (BC-2), mRNA  |
| NM_014382 | Homo sapiens ATPase, Ca++ transporting, type 2C, member 1 (ATP2C1), mRNA  |
| NM_014570 | Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA  |
| NM_014278 | Homo sapiens heat shock protein (hsp110 family) (APG-1), mRNA   |
| NM_014495 | Homo sapiens angiopoietin-like 3 (ANGPTL3), mRNA  |
| NM_004037 | Homo sapiens adenosine monophosphate deaminase 2 (isoform L) (AMPD2), mRNA  |
| NM_014324 | Homo sapiens alpha-methylacyl-CoA racemase (AMACR), mRNA  |
| NM_014476 | Homo sapiens alpha-actinin-2-associated LIM protein (ALP), mRNA   |
| NM_014423 | Homo sapiens ALL1 fused gene from 5q31 (AF5Q31), mRNA   |
| NM_014590 | Homo sapiens endogenous retroviral family W, env(C7), member 1 (syncytin) (ERVWE1), mRNA                                  |
| NM_014486 | Homo sapiens neuronal thread protein (AD7C-NTP), mRNA   |
| NM_014384 | Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA   |
| NM_014274 | Homo sapiens Alu-binding protein with zinc finger domain (ABP/ZF), mRNA   |
| NM_014444 | Homo sapiens gamma tubulin ring complex protein (76p gene) (76P), mRNA  |
| NM_007082 | Homo sapiens RAB, member of RAS oncogene family-like 2A (RABL2A), mRNA  |
| NM_013412 | Homo sapiens RAB, member of RAS oncogene family-like 2A (RABL2A), transcript variant 1, mRNA                              |
| NM_005036 | Homo sapiens peroxisome proliferative activated receptor, alpha (PPARA), mRNA   |
| NM_000793 | Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA  |
| NM_013989 | Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 1, mRNA  |

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| NM_004323 | Homo sapiens BCL2-associated athanogene (BAG1), mRNA  |
| NM_000156 | Homo sapiens guanidinoacetate N-methyltransferase (GAMT), mRNA  |
| NM_002782 | Homo sapiens pregnancy specific beta-1-glycoprotein 6 (PSG6), mRNA  |
| NM_005523 | Homo sapiens homeo box A11 (HOXA11), mRNA   |
| NM_007050 | Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA                                   |
| NM_006249 | Homo sapiens proline-rich protein BstNI subfamily 3 (PRB3), mRNA  |
| NM_005529 | Homo sapiens heparan sulfate proteoglycan 2 (perlecan) (HSPG2), mRNA  |
| NM_005187 | Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 3 (CBFA2T3), mRNA          |
| NM_005565 | Homo sapiens lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76kD) (LCP2), mRNA  |
| NM_002298 | Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCPI), mRNA  |
| NM_005190 | Homo sapiens cyclin C (CCNC), mRNA  |
| NM_005415 | Homo sapiens solute carrier family 20 (phosphate transporter), member 1 (SLC20A1), mRNA                     |
| NM_001040 | Homo sapiens sex hormone-binding globulin (SHBG), mRNA  |
| NM_002777 | Homo sapiens proteinase 3 (serine proteinase, neutrophil, Wegener granulomatosis autoantigen) (PRTN3), mRNA |
| NM_005199 | Homo sapiens cholinergic receptor, nicotinic, gamma polypeptide (CHRNA), mRNA                               |
| NM_013936 | Homo sapiens olfactory receptor, family 12, subfamily D, member 2 (OR12D2), mRNA                            |
| NM_013937 | Homo sapiens olfactory receptor, family 11, subfamily A, member 1 (OR11A1), mRNA                            |
| NM_013940 | Homo sapiens olfactory receptor, family 10, subfamily H, member 1 (OR10H1), mRNA                            |
| NM_013941 | Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA                            |
| NM_013938 | Homo sapiens olfactory receptor, family 10, subfamily H, member 3 (OR10H3), mRNA                            |
| NM_013939 | Homo sapiens olfactory receptor, family 10, subfamily H, member 2 (OR10H2), mRNA                            |
| NM_013452 | Homo sapiens variable charge, X chromosome (VCX), mRNA  |
| NM_013437 | Homo sapiens potential tumor suppressor (ST7), mRNA   |
| NM_013440 | Homo sapiens paired immunoglobulin-like receptor beta (PILRB(BETA)), mRNA                                   |
| NM_013439 | Homo sapiens paired immunoglobulin-like receptor alpha (PILRB(ALPHA)), mRNA                                 |
| NM_013446 | Homo sapiens makorin, ring finger protein, 1 (MKRN1), mRNA  |
| NM_007267 | Homo sapiens expressed in activated T/LAK lymphocytes (LAK-4P), mRNA  |
| NM_013450 | Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA                                   |
| NM_013448 | Homo sapiens bromodomain adjacent to zinc finger domain, 1A (BAZ1A), mRNA                                   |
| NM_000033 | Homo sapiens ATP-binding cassette, sub-family D (ALD), member 1 (ABCD1), mRNA                               |
| NM_002593 | Homo sapiens procollagen C-endopeptidase enhancer (PCOLCE), mRNA  |
| NM_004504 | Homo sapiens HIV-1 Rev binding protein (HRB), mRNA  |
| NM_004131 | Homo sapiens granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1) (GZMB), mRNA      |
| NM_000791 | Homo sapiens dihydrofolate reductase (DHFR), mRNA   |
| NM_004335 | Homo sapiens bone marrow stromal cell antigen 2 (BST2), mRNA  |
| NM_001197 | Homo sapiens BCL2-interacting killer (apoptosis-inducing) (BIK), mRNA                                       |

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| NM_013268 | Homo sapiens placental protein 13 (PP13), mRNA   |
| NM_013382 | Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA  |
| NM_013232 | Homo sapiens programmed cell death 6 (PDCD6), mRNA   |
| NM_013397 | Homo sapiens over-expressed breast tumor protein (OBTP), mRNA  |
| NM_013389 | Homo sapiens NPC1 (Niemann-Pick disease, type C1, gene)-like 1 (NPC1L1), mRNA  |
| NM_013326 | Homo sapiens colon cancer-associated protein Mic1 (MIC1), mRNA   |
| NM_013238 | Homo sapiens DNAJ domain-containing (MCJ), mRNA  |
| NM_013269 | Homo sapiens lectin-like NK cell receptor (LIT1), mRNA   |
| NM_013289 | Homo sapiens killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1 (KIR3DL1), mRNA                   |
| NM_013311 | Homo sapiens insulin upstream factor 1 (IUF1), mRNA  |
| NM_013278 | Homo sapiens interleukin 17C (IL17C), mRNA   |
| NM_013292 | Homo sapiens (clone PWHL2-24) myosin light chain 2 (HUMMLC2B), mRNA  |
| NM_013288 | Homo sapiens DNA binding protein for surfactant protein B (HUMBINDC), mRNA   |
| NM_013244 | Homo sapiens UDP-N-acetylglucosamine:alpha-1,3-D-mannoside beta-1,4-N-acetylglucosaminyltransferase IV-homolog (HGNT-IV-H), mRNA |
| NM_013264 | Homo sapiens gonadotropin-regulated testicular RNA helicase (GRTH), mRNA   |
| NM_013281 | Homo sapiens fibronectin leucine rich transmembrane protein 3 (FLRT3), mRNA  |
| NM_013231 | Homo sapiens fibronectin leucine rich transmembrane protein 2 (FLRT2), mRNA  |
| NM_013241 | Homo sapiens FH1/FH2 domain-containing protein (FHOS), mRNA  |
| NM_013342 | Homo sapiens TCF3 (E2A) fusion partner (in childhood Leukemia) (TFPT), mRNA  |
| NM_013246 | Homo sapiens cardiotrophin-like cytokine; neurotrophin-1/B-cell stimulating factor-3 (CLC), mRNA                                 |
| NM_013372 | Homo sapiens cysteine knot superfamily 1, BMP antagonist 1 (CKTSF1B1), mRNA  |
| NM_013327 | Homo sapiens CGI-56 protein (CGI-56), mRNA   |
| NM_013230 | Homo sapiens CD24 antigen (small cell lung carcinoma cluster 4 antigen) (CD24), mRNA   |
| NM_013276 | Homo sapiens carbohydrate kinase-like (CARKL), mRNA  |
| NM_013399 | Homo sapiens chromosome 16 open reading frame 5 (C16orf5), mRNA  |
| NM_006765 | Homo sapiens Putative prostate cancer tumor suppressor (N33), mRNA   |
| NM_006792 | Homo sapiens mortality factor 4 (MORF4), mRNA  |
| NM_000397 | Homo sapiens cytochrome b-245, beta polypeptide (chronic granulomatous disease) (CYBB), mRNA                                     |
| NM_005098 | Homo sapiens musculin (activated B-cell factor-1) (MSC), mRNA  |
| NM_006144 | Homo sapiens granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3) (GZMA), mRNA                           |
| NM_002047 | Homo sapiens glycyl-tRNA synthetase (GARS), mRNA   |
| NM_004405 | Homo sapiens distal-less homeo box 2 (DLX2), mRNA  |
| NM_004371 | Homo sapiens coatamer protein complex, subunit alpha (COPA), mRNA  |
| NM_005181 | Homo sapiens carbonic anhydrase III, muscle specific (CA3), mRNA   |
| NM_001663 | Homo sapiens ADP-ribosylation factor 6 (ARF6), mRNA  |
| NM_001662 | Homo sapiens ADP-ribosylation factor 5 (ARF5), mRNA  |
| NM_001660 | Homo sapiens ADP-ribosylation factor 4 (ARF4), mRNA  |
| NM_001658 | Homo sapiens ADP-ribosylation factor 1 (ARF1), mRNA  |
| NM_000492 | Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-   |



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|           | binding cassette (sub-family C, member 7) (CFTR), mRNA   |
| NM_003560 | Homo sapiens phospholipase A2, group VI (cytosolic, calcium-independent) (PLA2G6), mRNA                              |
| NM_004004 | Homo sapiens gap junction protein, beta 2, 26kD (connexin 26) (GJB2), mRNA   |
| NM_005198 | Homo sapiens choline kinase-like (CHKL), mRNA  |
| NM_012482 | Homo sapiens zinc finger protein 281 (ZNF281), mRNA  |
| NM_012256 | Homo sapiens zinc finger protein 212 (ZNF212), mRNA  |
| NM_012479 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide (YWHAG), mRNA |
| NM_012255 | Homo sapiens 5'-3' exoribonuclease 2 (XRN2), mRNA  |
| NM_012474 | Homo sapiens uridine monophosphate kinase (UMPK), mRNA   |
| NM_012473 | Homo sapiens thioredoxin, mitochondrial (TXN2), mRNA   |
| NM_012466 | Homo sapiens tetraspanin TM4-B (TM4-B), mRNA   |
| NM_012465 | Homo sapiens tolloid-like 2 (TLL2), mRNA   |
| NM_012464 | Homo sapiens tolloid-like 1 (TLL1), mRNA   |
| NM_012290 | Homo sapiens tousled-like kinase 1 (TLK1), mRNA  |
| NM_012455 | Homo sapiens SEC7 homolog (TIC), mRNA  |
| NM_012454 | Homo sapiens T-cell lymphoma invasion and metastasis 2 (TIAM2), mRNA   |
| NM_012251 | Homo sapiens transcription factor A, mitochondrial (TFAM), mRNA  |
| NM_012451 | Homo sapiens synaptogyrin 4 (SYNGR4), mRNA   |
| NM_012448 | Homo sapiens signal transducer and activator of transcription 5B (STAT5B), mRNA                                      |
| NM_012447 | Homo sapiens stromal antigen 3 (STAG3), mRNA   |
| NM_012445 | Homo sapiens spondin 2, extracellular matrix protein (SPON2), mRNA   |
| NM_012443 | Homo sapiens sperm associated antigen 6 (SPAG6), mRNA  |
| NM_012244 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 8 (SLC7A8), mRNA           |
| NM_012243 | Homo sapiens solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transporter), member 3 (SLC35A3), mRNA   |
| NM_012434 | Homo sapiens solute carrier family 17 (anion/sugar transporter), member 5 (SLC17A5), mRNA                            |
| NM_012432 | Homo sapiens SET domain, bifurcated 1 (SETDB1), mRNA   |
| NM_012427 | Homo sapiens kallikrein 5 (KLK5), mRNA   |
| NM_012236 | Homo sapiens sex comb on midleg homolog 1 (SCMH1), mRNA  |
| NM_012424 | Homo sapiens ribosomal protein S6 kinase, 52kD, polypeptide 1 (RPS6KC1), mRNA  |
| NM_012421 | Homo sapiens rearranged L-myc fusion sequence (RLF), mRNA  |
| NM_012415 | Homo sapiens RAD54, S. cerevisiae, homolog of, B (RAD54B), mRNA  |
| NM_012410 | Homo sapiens type I transmembrane receptor (seizure-related protein) (PSK-1), mRNA                                   |
| NM_012409 | Homo sapiens prion gene complex, downstream (PRND), mRNA   |
| NM_012402 | Homo sapiens partner of RAC1 (arfaptin 2) (POR1), mRNA   |
| NM_012400 | Homo sapiens phospholipase A2, group IID (PLA2G2D), mRNA   |
| NM_012399 | Homo sapiens phosphatidylinositol transfer protein, beta (PITPNB), mRNA  |
| NM_012088 | Homo sapiens 6-phosphogluconolactonase (PGLS), mRNA  |
| NM_012395 | Homo sapiens PFTAIR protein kinase 1 (PFTK1), mRNA   |
| NM_012391 | Homo sapiens prostate epithelium-specific Ets transcription factor (PDEF), mRNA                                      |
| NM_012385 | Homo sapiens p8 protein (candidate of metastasis 1) (P8), mRNA   |
| NM_012383 | Homo sapiens osteoclast stimulating factor 1 (OSTF1), mRNA   |
| NM_012375 | Homo sapiens olfactory receptor, family 52, subfamily A, member 1 (OR52A1), mRNA                                     |

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| NM_012368 | Homo sapiens olfactory receptor, family 2, subfamily C, member 1 (OR2C1), mRNA                                       |
| NM_012360 | Homo sapiens olfactory receptor, family 1, subfamily F, member 8 (OR1F8), mRNA                                       |
| NM_012352 | Homo sapiens olfactory receptor, family 1, subfamily A, member 2 (OR1A2), mRNA                                       |
| NM_012351 | Homo sapiens olfactory receptor, family 10, subfamily J, member 1 (OR10J1), mRNA                                     |
| NM_012345 | Homo sapiens nuclear fragile X mental retardation protein interacting protein 1 (NUFIP1), mRNA                       |
| NM_012344 | Homo sapiens neurotensin receptor 2 (NTSR2), mRNA  |
| NM_012343 | Homo sapiens nicotinamide nucleotide transhydrogenase (NNT), mRNA  |
| NM_012342 | Homo sapiens putative transmembrane protein (NMA), mRNA  |
| NM_012337 | Homo sapiens nasopharyngeal epithelium specific protein 1 (NESG1), mRNA  |
| NM_012330 | Homo sapiens histone acetyltransferase (MORF), mRNA  |
| NM_012064 | Homo sapiens major intrinsic protein of lens fiber (MIP), mRNA   |
| NM_012214 | Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isoenzyme A (MGAT4A), mRNA |
| NM_012213 | Homo sapiens malonyl-CoA decarboxylase (MLYCD), mRNA   |
| NM_012325 | Homo sapiens microtubule-associated protein, RP/EB family, member 1 (MAPRE1), mRNA                                   |
| NM_012318 | Homo sapiens leucine zipper-EF-hand containing transmembrane protein 1 (LETM1), mRNA                                 |
| NM_012317 | Homo sapiens leucine zipper, down-regulated in cancer 1 (LDOC1), mRNA  |
| NM_012314 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 4 (KIR2DS4), mRNA        |
| NM_012313 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 3 (KIR2DS3), mRNA        |
| NM_012312 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 2 (KIR2DS2), mRNA        |
| NM_012307 | Homo sapiens differentially expressed in adenocarcinoma of the lung (KIAA0987), mRNA                                 |
| NM_012306 | Homo sapiens lifeguard (KIAA0950), mRNA  |
| NM_012302 | Homo sapiens latrophilin (KIAA0786), mRNA  |
| NM_012295 | Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA  |
| NM_012288 | Homo sapiens TRAM-like protein (KIAA0057), mRNA  |
| NM_012286 | Homo sapiens MORF-related gene X (KIAA0026), mRNA  |
| NM_012283 | Homo sapiens potassium voltage-gated channel, subfamily G, member 2 (KCNG2), mRNA                                    |
| NM_012282 | Homo sapiens potassium voltage-gated channel, Isk-related family, member 1-like (KCNE1L), mRNA                       |
| NM_012278 | Homo sapiens integrin beta 1 binding protein (melusin) 2 (ITGB1BP2), mRNA  |
| NM_012211 | Homo sapiens integrin, alpha 11 (ITGA11), mRNA   |
| NM_012277 | Homo sapiens pancreatic beta cell growth factor (INGAP), mRNA  |
| NM_012275 | Homo sapiens interleukin-1 receptor antagonist homolog 1 (IL1HY1), mRNA  |
| NM_012259 | Homo sapiens hairy/enhancer-of-split related with YRPW motif 2 (HEY2), mRNA  |
| NM_012258 | Homo sapiens hairy/enhancer-of-split related with YRPW motif 1 (HEY1), mRNA  |
| NM_012257 | Homo sapiens HMG-box containing protein 1 (HBPI), mRNA   |
| NM_012087 | Homo sapiens general transcription factor IIIC, polypeptide 5 (63kD) (GTF3C5), mRNA                                  |

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| NM_012203 | Homo sapiens glyoxylate reductase/hydroxypyruvate reductase (GRHPR), mRNA  |
| NM_012202 | Homo sapiens guanine nucleotide binding protein (G protein), gamma 3 (GNG3), mRNA                                    |
| NM_012084 | Homo sapiens Glutamate dehydrogenase-2 (GLUD2), mRNA   |
| NM_012191 | Homo sapiens putative tumor suppressor (FUS2), mRNA  |
| NM_012185 | Homo sapiens forkhead box E2 (FOXE2), mRNA   |
| NM_012183 | Homo sapiens forkhead box D3 (FOXD3), mRNA   |
| NM_012153 | Homo sapiens Ets homologous factor (EHF), mRNA   |
| NM_012080 | Homo sapiens DNA segment, numerous copies, expressed probes (GS1 gene) (DXF68S1E), mRNA                              |
| NM_012148 | Homo sapiens double homeobox, 3 (DUX3), mRNA   |
| NM_012147 | Homo sapiens double homeobox, 2 (DUX2), mRNA   |
| NM_012145 | Homo sapiens deoxythymidylate kinase (thymidylate kinase) (DTYMK), mRNA  |
| NM_012144 | Homo sapiens dynein, axonemal, intermediate polypeptide, 1 (DNAI1), mRNA   |
| NM_012140 | Homo sapiens solute carrier family 25 (mitochondrial carrier; dicarboxylate transporter), member 10 (SLC25A10), mRNA |
| NM_012137 | Homo sapiens dimethylarginine dimethylaminohydrolase 1 (DDAH1), mRNA   |
| NM_012134 | Homo sapiens leiomodulin 1 (smooth muscle) (LMOD1), mRNA   |
| NM_012133 | Homo sapiens coatamer protein complex, subunit gamma 2 (COPG2), mRNA   |
| NM_012132 | Homo sapiens claudin 8 (CLDN8), mRNA   |
| NM_012131 | Homo sapiens claudin 17 (CLDN17), mRNA   |
| NM_012130 | Homo sapiens claudin 14 (CLDN14), mRNA   |
| NM_012129 | Homo sapiens claudin 12 (CLDN12), mRNA   |
| NM_012127 | Homo sapiens Cipl-interacting zinc finger protein (CIZ1), mRNA   |
| NM_012126 | Homo sapiens carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5 (CHST5), mRNA                                 |
| NM_012075 | Homo sapiens Conserved gene telomeric to alpha globin cluster (CGTHBA), mRNA   |
| NM_012122 | Homo sapiens carboxylesterase 3 (brain) (CES3), mRNA   |
| NM_012116 | Homo sapiens Cas-Br-M (murine) ectropic retroviral transforming sequence c (CBLC), mRNA                              |
| NM_012113 | Homo sapiens carbonic anhydrase XIV (CA14), mRNA   |
| NM_012071 | Homo sapiens BUP protein (BUP), mRNA   |
| NM_012110 | Homo sapiens cystein-rich hydrophobic domain 2 (CHIC2), mRNA   |
| NM_012109 | Homo sapiens brain-specific membrane-anchored protein (BSMAP), mRNA  |
| NM_012107 | Homo sapiens bromodomain containing protein 75 kDa human homolog (BP75), mRNA  |
| NM_012104 | Homo sapiens beta-site APP-cleaving enzyme (BACE), mRNA  |
| NM_012105 | Homo sapiens beta-site APP-cleaving enzyme 2 (BACE2), mRNA   |
| NM_012103 | Homo sapiens ancient ubiquitous protein 1 (AUP1), mRNA   |
| NM_012102 | Homo sapiens arginine-glutamic acid dipeptide (RE) repeats (RERE), mRNA  |
| NM_012099 | Homo sapiens CD3-epsilon-associated protein; antisense to ERCC-1 (ASE-1), mRNA                                       |
| NM_012098 | Homo sapiens angiopoietin-like 2 (ANGPTL2), mRNA   |
| NM_012067 | Homo sapiens aldo-keto reductase family 7, member A3 (aflatoxin aldehyde reductase) (AKR7A3), mRNA                   |
| NM_012093 | Homo sapiens adenylate kinase 5 (AK5), mRNA  |
| NM_012066 | Homo sapiens hypothetical protein (20D7-FC4), mRNA   |
| NM_006276 | Homo sapiens splicing factor, arginine/serine-rich 7 (35kD) (SFRS7), mRNA  |
| NM_007054 | Homo sapiens kinesin family member 3A (KIF3A), mRNA  |
| NM_002201 | Homo sapiens interferon stimulated gene (20kD) (ISG20), mRNA   |

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| NM_007274 | Homo sapiens cytosolic acyl coenzyme A thioester hydrolase (HBACH), mRNA  |
| NM_004174 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 (SLC9A3), mRNA                              |
| NM_004525 | Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA   |
| NM_003129 | Homo sapiens squalene epoxidase (SQLE), mRNA  |
| NM_003628 | Homo sapiens plakophilin 4 (PKP4), mRNA   |
| NM_003734 | Homo sapiens amine oxidase, copper containing 3 (vascular adhesion protein 1) (AOC3), mRNA                              |
| NM_003322 | Homo sapiens tubby like protein 1 (TULP1), mRNA   |
| NM_002747 | Homo sapiens mitogen-activated protein kinase 4 (MAPK4), mRNA   |
| NM_002078 | Homo sapiens golgi autoantigen, golgin subfamily a, 4 (GOLGA4), mRNA  |
| NM_006421 | Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA                                   |
| NM_004282 | Homo sapiens BCL2-associated athanogene 2 (BAG2), mRNA  |
| NM_004304 | Homo sapiens anaplastic lymphoma kinase (Ki-1) (ALK), mRNA  |
| NM_001626 | Homo sapiens v-akt murine thymoma viral oncogene homolog 2 (AKT2), mRNA   |
| NM_000686 | Homo sapiens angiotensin receptor 2 (AGTR2), mRNA   |
| NM_006287 | Homo sapiens tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor) (TFPI), mRNA                |
| NM_000944 | Homo sapiens protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform (calcineurin A alpha) (PPP3CA), mRNA |
| NM_001142 | Homo sapiens amelogenin (X chromosome, amelogenesis imperfecta 1) (AMELX), mRNA   |
| NM_001171 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 6 (ABCC6), mRNA                                      |
| NM_007351 | Homo sapiens multimerin (MMRN), mRNA  |
| NM_007355 | Homo sapiens heat shock 90kD protein 1, beta (HSPCB), mRNA  |
| NM_007354 | Homo sapiens putative GR6 protein (GR6), mRNA   |
| NM_007353 | Homo sapiens guanine nucleotide binding protein (G protein) alpha 12 (GNA12), mRNA                                      |
| NM_007366 | Homo sapiens phospholipase A2 receptor 1, 180kD (PLA2R1), mRNA  |
| NM_007350 | Homo sapiens pleckstrin homology-like domain, family A, member 1 (PHLDA1), mRNA   |
| NM_007364 | Homo sapiens integral type I protein (P24B), mRNA   |
| NM_007342 | Homo sapiens nucleoporin-like protein 1 (NLP 1), mRNA   |
| NM_007361 | Homo sapiens nidogen 2 (NID2), mRNA   |
| NM_007341 | Homo sapiens SH3 domain binding glutamic acid-rich protein (SH3BGR), mRNA   |
| NM_007370 | Homo sapiens replication factor C (activator 1) 5 (36.5kD) (RFC5), mRNA   |
| NM_007348 | Homo sapiens activating transcription factor 6 (ATF6), mRNA   |
| NM_004850 | Homo sapiens Rho-associated, coiled-coil containing protein kinase 2 (ROCK2), mRNA                                      |
| NM_005574 | Homo sapiens LIM domain only 2 (rhombotin-like 1) (LMO2), mRNA  |
| NM_006094 | Homo sapiens deleted in liver cancer 1 (DLC1), mRNA   |
| NM_003658 | Homo sapiens BarH-like homeobox 2 (BARX2), mRNA   |
| NM_004209 | Homo sapiens synaptogyrin 3 (SYNGR3), mRNA  |
| NM_004879 | Homo sapiens etoposide-induced mRNA (PIG8), mRNA  |
| NM_005385 | Homo sapiens natural killer-tumor recognition sequence (NKTR), mRNA   |
| NM_005957 | Homo sapiens 5,10-methylenetetrahydrofolate reductase (NADPH) (MTHFR), mRNA   |
| NM_002248 | Homo sapiens potassium intermediate/small conductance calcium-activated   |

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|           | channel, subfamily N, member 1 (KCNN1), mRNA  |
| NM_001563 | Homo sapiens interphotoreceptor matrix proteoglycan 1 (IMPG1), mRNA   |
| NM_005266 | Homo sapiens gap junction protein, alpha 5, 40kD (connexin 40) (GJA5), mRNA   |
| NM_001874 | Homo sapiens carboxypeptidase M (CPM), mRNA   |
| NM_007332 | Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA   |
| NM_003313 | Homo sapiens tissue specific transplantation antigen P35B (TSTA3), mRNA   |
| NM_001494 | Homo sapiens GDP dissociation inhibitor 2 (GDI2), mRNA  |
| NM_001607 | Homo sapiens acetyl-Coenzyme A acyltransferase 1 (peroxisomal 3-oxoacyl-Coenzyme A thiolase) (ACAA1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_003145 | Homo sapiens signal sequence receptor, beta (translocon-associated protein beta) (SSR2), mRNA   |
| NM_000852 | Homo sapiens glutathione S-transferase pi (GSTP1), mRNA   |
| NM_000827 | Homo sapiens glutamate receptor, ionotropic, AMPA 1 (GRIA1), mRNA   |
| NM_005252 | Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA   |
| NM_005803 | Homo sapiens flotillin 1 (FLOT1), mRNA  |
| NM_004459 | Homo sapiens fetal Alzheimer antigen (FALZ), mRNA   |
| NM_004081 | Homo sapiens deleted in azoospermia (DAZ), mRNA   |
| NM_004055 | Homo sapiens calpain 5 (CAPN5), mRNA  |
| NM_004042 | Homo sapiens arylsulfatase F (ARSF), mRNA   |
| NM_003085 | Homo sapiens synuclein, beta (SNCB), mRNA   |
| NM_000612 | Homo sapiens insulin-like growth factor 2 (somatomedin A) (IGF2), mRNA  |
| NM_006995 | Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA  |
| NM_005739 | Homo sapiens RAS guanyl releasing protein 1 (calcium and DAG-regulated) (RASGRP1), mRNA   |
| NM_006267 | Homo sapiens RAN binding protein 2 (RANBP2), mRNA   |
| NM_002882 | Homo sapiens RAN binding protein 1 (RANBP1), mRNA   |
| NM_003884 | Homo sapiens p300/CBP-associated factor (PCAF), mRNA  |
| NM_005258 | Homo sapiens GTP cyclohydrolase I feedback regulatory protein (GCHFR), mRNA   |
| NM_001130 | Homo sapiens amino-terminal enhancer of split (AES), mRNA   |
| NM_001099 | Homo sapiens acid phosphatase, prostate (ACPP), mRNA  |
| NM_005155 | Homo sapiens palmitoyl-protein thioesterase 2 (PPT2), mRNA  |
| NM_006898 | Homo sapiens homeo box D3 (HOXD3), mRNA   |
| NM_006894 | Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA   |
| NM_004111 | Homo sapiens flap structure-specific endonuclease 1 (FEN1), mRNA  |
| NM_001828 | Homo sapiens Charot-Leyden crystal protein (CLC), mRNA  |
| NM_007315 | Homo sapiens signal transducer and activator of transcription 1, 91kD (STAT1), mRNA   |
| NM_005005 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22) (NDUFB9), mRNA  |
| NM_003362 | Homo sapiens uracil-DNA glycosylase (UNG), mRNA   |
| NM_005221 | Homo sapiens distal-less homeo box 5 (DLX5), mRNA   |
| NM_000479 | Homo sapiens anti-Mullerian hormone (AMH), mRNA   |
| NM_005160 | Homo sapiens adrenergic, beta, receptor kinase 2 (ADRBK2), mRNA   |
| NM_001619 | Homo sapiens adrenergic, beta, receptor kinase 1 (ADRBK1), mRNA   |
| NM_001611 | Homo sapiens acid phosphatase 5, tartrate resistant (ACP5), mRNA  |
| NM_003403 | Homo sapiens YY1 transcription factor (YY1), mRNA   |
| NM_003793 | Homo sapiens cathepsin F (CTSF), mRNA   |
| NM_001922 | Homo sapiens dopachrome tautomerase (dopachrome delta-isomerase, tyrosine-related protein 2) (DCT), mRNA  |

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| NM_006412 | Homo sapiens 1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase, beta) (AGPAT2), mRNA                          |
| NM_000810 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 5 (GABRA5), mRNA  |
| NM_000430 | Homo sapiens platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit (45kD) (PAFAH1B1), mRNA  |
| NM_003006 | Homo sapiens selectin P ligand (SELPLG), mRNA   |
| NM_002634 | Homo sapiens prohibitin (PHB), mRNA   |
| NM_002410 | Homo sapiens mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (MGAT5), mRNA  |
| NM_002409 | Homo sapiens mannosyl (beta-1,4-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase (MGAT3), mRNA   |
| NM_002408 | Homo sapiens mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT2), mRNA  |
| NM_002406 | Homo sapiens mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT1), mRNA  |
| NM_005923 | Homo sapiens mitogen-activated protein kinase kinase kinase 5 (MAP3K5), mRNA  |
| NM_002225 | Homo sapiens isovaleryl Coenzyme A dehydrogenase (IVD), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001480 | Homo sapiens galanin receptor 1 (GALR1), mRNA   |
| NM_001992 | Homo sapiens coagulation factor II (thrombin) receptor (F2R), mRNA  |
| NM_000677 | Homo sapiens adenosine A3 receptor (ADORA3), mRNA   |
| NM_002969 | Homo sapiens mitogen-activated protein kinase 12 (MAPK12), mRNA   |
| NM_001526 | Homo sapiens hypocretin (orexin) receptor 2 (HCRT2), mRNA   |
| NM_003605 | Homo sapiens O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) (OGT), mRNA |
| NM_000885 | Homo sapiens integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor) (ITGA4), mRNA   |
| NM_003197 | Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCEB1L), mRNA  |
| NM_006183 | Homo sapiens neurotensin (NTS), mRNA  |
| NM_002524 | Homo sapiens neuroblastoma RAS viral (v-ras) oncogene homolog (NRAS), mRNA  |
| NM_002478 | Homo sapiens myogenic factor 3 (MYOD1), mRNA  |
| NM_002451 | Homo sapiens methylthioadenosine phosphorylase (MTAP), mRNA   |
| NM_002436 | Homo sapiens membrane protein, palmitoylated 1 (55kD) (MPP1), mRNA  |
| NM_002377 | Homo sapiens MAS1 oncogene (MAS1), mRNA   |
| NM_002305 | Homo sapiens lectin, galactoside-binding, soluble, I (galectin 1) (LGALS1), mRNA  |
| NM_000887 | Homo sapiens integrin, alpha X (antigen CD11C (p150), alpha polypeptide) (ITGAX), mRNA  |
| NM_000419 | Homo sapiens integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B) (ITGA2B), mRNA                                     |
| NM_002203 | Homo sapiens integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) (ITGA2), mRNA   |
| NM_003637 | Homo sapiens integrin, alpha 10 (ITGA10), mRNA  |
| NM_000843 | Homo sapiens glutamate receptor, metabotropic 6 (GRM6), mRNA  |
| NM_000838 | Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA  |
| NM_000835 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2C (GRIN2C), mRNA   |

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| NM_000834 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B), mRNA                           |
| NM_000833 | Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A), mRNA                           |
| NM_002084 | Homo sapiens glutathione peroxidase 3 (plasma) (GPX3), mRNA   |
| NM_000805 | Homo sapiens gastrin (GAS), mRNA  |
| NM_001940 | Homo sapiens dentatorubral-pallidoluysian atrophy (atrophin-1) (DRPLA), mRNA                                  |
| NM_001219 | Homo sapiens calumenin (CALU), mRNA   |
| NM_007155 | Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA                                     |
| NM_007136 | Homo sapiens zinc finger protein 80 (pT17) (ZNF80), mRNA  |
| NM_007250 | Homo sapiens Kruppel-like factor 8 (KLF8), mRNA   |
| NM_007167 | Homo sapiens zinc finger protein 258 (ZNF258), mRNA   |
| NM_007153 | Homo sapiens zinc finger protein 208 (ZNF208), mRNA   |
| NM_007152 | Homo sapiens zinc finger protein 195 (ZNF195), mRNA   |
| NM_007150 | Homo sapiens zinc finger protein 185 (LIM domain) (ZNF185), mRNA  |
| NM_007147 | Homo sapiens zinc finger protein 175 (ZNF175), mRNA   |
| NM_007145 | Homo sapiens zinc finger protein 146 (ZNF146), mRNA   |
| NM_007127 | Homo sapiens villin 1 (VIL1), mRNA  |
| NM_007125 | Homo sapiens ubiquitously transcribed tetratricopeptide repeat gene, Y chromosome (UTY), mRNA                 |
| NM_007124 | Homo sapiens utrophin (homologous to dystrophin) (UTRN), mRNA   |
| NM_007122 | Homo sapiens upstream transcription factor 1 (USF1), mRNA   |
| NM_007120 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B (UGT2B), mRNA                                    |
| NM_007106 | Homo sapiens ubiquitin-like 3 (UBL3), mRNA  |
| NM_007118 | Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA  |
| NM_007117 | Homo sapiens thyrotropin-releasing hormone (TRH), mRNA  |
| NM_007218 | Homo sapiens patched related protein translocated in renal cancer (TRC8), mRNA                                |
| NM_007233 | Homo sapiens TP53 target gene 1 (TP53TG1), mRNA   |
| NM_007114 | Homo sapiens TATA element modulatory factor 1 (TMF1), mRNA  |
| NM_007112 | Homo sapiens thrombospondin 3 (THBS3), mRNA   |
| NM_007111 | Homo sapiens transcription factor Dp-1 (TFDP1), mRNA  |
| NM_007109 | Homo sapiens transcription factor 19 (SC1) (TCF19), mRNA  |
| NM_007108 | Homo sapiens transcription elongation factor B (SIII), polypeptide 2 (18kD, elongin B) (TCEB2), mRNA          |
| NM_007105 | Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like antisense (SLC22A1LS), mRNA |
| NM_007163 | Homo sapiens solute carrier family 14 (urea transporter), member 2 (SLC14A2), mRNA                            |
| NM_007101 | Homo sapiens sarcosine dehydrogenase (SARDH), mRNA  |
| NM_007165 | Homo sapiens splicing factor 3a, subunit 2, 66kD (SF3A2), mRNA  |
| NM_007252 | Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA   |
| NM_007273 | Homo sapiens B-cell associated protein (REA), mRNA  |
| NM_007195 | Homo sapiens polymerase (DNA directed) iota (POLI), mRNA  |
| NM_007284 | Homo sapiens protein tyrosine kinase 9-like (A6-related protein) (PTK9L), mRNA                                |
| NM_007196 | Homo sapiens kallikrein 8 (neuropsin/ovasin) (KLK8), mRNA   |
| NM_007171 | Homo sapiens protein-O-mannosyltransferase 1 (POMT1), mRNA  |
| NM_007215 | Homo sapiens polymerase (DNA directed), gamma 2, accessory subunit (POLG2), mRNA                              |

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| NM_007254 | Homo sapiens polynucleotide kinase 3'-phosphatase (PNKP), mRNA  |
| NM_007221 | Homo sapiens polyamine-modulated factor 1 (PMF1), mRNA  |
| NM_007183 | Homo sapiens plakophilin 3 (PKP3), mRNA   |
| NM_007169 | Homo sapiens phosphatidylethanolamine N-methyltransferase (PEMT), mRNA                                      |
| NM_007229 | Homo sapiens protein kinase C and casein kinase substrate in neurons 2 (PACSIN2), mRNA                      |
| NM_007190 | Homo sapiens Sec23-interacting protein p125 (P125), mRNA  |
| NM_007160 | Homo sapiens olfactory receptor, family 2, subfamily H, member 3 (OR2H3), mRNA                              |
| NM_007256 | Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA                 |
| NM_007172 | Homo sapiens nucleoporin 50kD (NUP50), mRNA   |
| NM_007103 | Homo sapiens NADH dehydrogenase (ubiquinone) flavoprotein 1 (51kD) (NDUFV1), mRNA                           |
| NM_007181 | Homo sapiens mitogen-activated protein kinase kinase kinase 1 (MAP4K1), mRNA                                |
| NM_007230 | Homo sapiens mannosidase, alpha, class 1B, member 1 (MAN1B1), mRNA  |
| NM_007164 | Homo sapiens mucosal vascular addressin cell adhesion molecule 1 (MADCAM1), mRNA                            |
| NM_007216 | Homo sapiens alpha integrin binding protein 63 (KIAA1017), mRNA   |
| NM_007213 | Homo sapiens JM4 protein (JM4), mRNA  |
| NM_007102 | Homo sapiens guanylate cyclase activator 2B (uroguanylin) (GUCA2B), mRNA                                    |
| NM_007227 | Homo sapiens G protein-coupled receptor 45 (GPR45), mRNA  |
| NM_007275 | Homo sapiens lung cancer candidate (FUS1), mRNA   |
| NM_007262 | Homo sapiens RNA-binding protein regulatory subunit (DJ-1), mRNA  |
| NM_007166 | Homo sapiens Clathrin assembly lymphoid-myeloid leukemia gene (CLTH), mRNA                                  |
| NM_007186 | Homo sapiens centrosomal protein 2 (CEP2), mRNA   |
| NM_006585 | Homo sapiens chaperonin containing TCPI, subunit 8 (theta) (CCT8), mRNA                                     |
| NM_007185 | Homo sapiens trinucleotide repeat containing 4 (TNRC4), mRNA  |
| NM_007220 | Homo sapiens carbonic anhydrase VB, mitochondrial (CA5B), nuclear gene encoding mitochondrial protein, mRNA |
| NM_007100 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit e (ATP5I), mRNA   |
| NM_007231 | Homo sapiens solute carrier family 6 (neurotransmitter transporter), member 14 (SLC6A14), mRNA              |
| NM_007203 | Homo sapiens A kinase (PRKA) anchor protein 2 (AKAP2), mRNA   |
| NM_007202 | Homo sapiens A kinase (PRKA) anchor protein 10 (AKAP10), mRNA   |
| NM_007168 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA                              |
| NM_000506 | Homo sapiens coagulation factor II (thrombin) (F2), mRNA  |
| NM_004343 | Homo sapiens calreticulin (CALR), mRNA  |
| NM_006736 | Homo sapiens heat shock protein, neuronal DNAJ-like 1 (HSJ1), mRNA  |
| NM_006553 | Homo sapiens erythroid differentiation and denucleation factor 1 (HFL-EDDG1), mRNA                          |
| NM_006984 | Homo sapiens claudin 10 (CLDN10), mRNA  |
| NM_005502 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 1 (ABCA1), mRNA                              |
| NM_005809 | Homo sapiens peroxiredoxin 2 (PRDX2), mRNA  |
| NM_006977 | Homo sapiens zinc finger protein 46 (KUP) (ZNF46), mRNA   |
| NM_006965 | Homo sapiens zinc finger protein 24 (KOX 17) (ZNF24), mRNA  |
| NM_006963 | Homo sapiens zinc finger protein 22 (KOX 15) (ZNF22), mRNA  |



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| NM_006978 | Homo sapiens zinc finger protein 183 (RING finger, C3HC4 type) (ZNF183), mRNA                                     |
| NM_006953 | Homo sapiens uroplakin 3 (UPK3), mRNA   |
| NM_006952 | Homo sapiens uroplakin 1B (UPK1B), mRNA   |
| NM_006951 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, D, 100kD (TAF2D), mRNA          |
| NM_006950 | Homo sapiens synapsin I (SYN1), mRNA  |
| NM_007056 | Homo sapiens suppressor of white apricot homolog 2 (SWAP2), mRNA  |
| NM_006949 | Homo sapiens syntaxin binding protein 2 (STXBP2), mRNA  |
| NM_006948 | Homo sapiens stress 70 protein chaperone, microsome-associated, 60kD (STCH), mRNA                                 |
| NM_006946 | Homo sapiens spectrin, beta, non-erythrocytic 2 (SPTBN2), mRNA  |
| NM_006945 | Homo sapiens small proline-rich protein 2B (SPRR2B), mRNA   |
| NM_006944 | Homo sapiens secreted phosphoprotein 2, 24kD (SPP2), mRNA   |
| NM_007009 | Homo sapiens zona pellucida binding protein (SP38), mRNA  |
| NM_006940 | Homo sapiens SRY (sex determining region Y)-box 5 (SOX5), mRNA  |
| NM_007017 | Homo sapiens SRY (sex determining region Y)-box 30 (SOX30), mRNA  |
| NM_006943 | Homo sapiens SRY (sex determining region Y)-box 22 (SOX22), mRNA  |
| NM_007084 | Homo sapiens SRY (sex determining region Y)-box 21 (SOX21), mRNA  |
| NM_006942 | Homo sapiens SRY (sex determining region Y)-box 20 (SOX20), mRNA  |
| NM_006941 | Homo sapiens SRY (sex determining region Y)-box 10 (SOX10), mRNA  |
| NM_006934 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, glycine), member 9 (SLC6A9), mRNA             |
| NM_006933 | Homo sapiens solute carrier family 5 (inositol transporters), member 3 (SLC5A3), mRNA                             |
| NM_006931 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 3 (SLC2A3), mRNA                   |
| NM_006930 | Homo sapiens S-phase kinase-associated protein 1A (p19A) (SKP1A), mRNA  |
| NM_006925 | Homo sapiens splicing factor, arginine/serine-rich 5 (SFRS5), mRNA  |
| NM_006924 | Homo sapiens splicing factor, arginine/serine-rich 1 (splicing factor 2, alternate splicing factor) (SFRS1), mRNA |
| NM_006917 | Homo sapiens retinoid X receptor, gamma (RXRG), mRNA  |
| NM_006987 | Homo sapiens rabphilin 3A-like (without C2 domains) (RPH3AL), mRNA  |
| NM_007055 | Homo sapiens polymerase (RNA) III (DNA directed) (155kD) (RPC155), mRNA   |
| NM_006915 | Homo sapiens retinitis pigmentosa 2 (X-linked recessive) (RP2), mRNA  |
| NM_006914 | Homo sapiens RAR-related orphan receptor B (RORB), mRNA   |
| NM_006913 | Homo sapiens ring finger protein 5 (RNF5), mRNA   |
| NM_006911 | Homo sapiens relaxin 1 (H1) (RLN1), mRNA  |
| NM_007043 | Homo sapiens HIV-1 rev binding protein 2 (HRB2), mRNA   |
| NM_007033 | Homo sapiens similar to S. cerevisiae RER1 (RER1), mRNA   |
| NM_007081 | Homo sapiens RAB, member of RAS oncogene family-like 2B (RABL2B), mRNA  |
| NM_006905 | Homo sapiens pregnancy specific beta-1-glycoprotein 1 (PSG1), mRNA  |
| NM_007016 | Homo sapiens protein similar to E.coli yhdg and R. capsulatus nifR3 (PP35), mRNA                                  |
| NM_007024 | Homo sapiens PL6 protein (PL6), mRNA  |
| NM_007030 | Homo sapiens brain-specific protein p25 alpha (p25), mRNA   |
| NM_006901 | Homo sapiens myosin IXA (MYO9A), mRNA   |
| NM_007075 | Homo sapiens JM5 protein (JM5), mRNA  |
| NM_007003 | Homo sapiens JM27 protein (JM27), mRNA  |
| NM_006899 | Homo sapiens isocitrate dehydrogenase 3 (NAD+) beta (IDH3B), mRNA   |

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| NM_007031 | Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA  |
| NM_007011 | Homo sapiens putative transmembrane protein (HS1-2), mRNA  |
| NM_006896 | Homo sapiens homeo box A7 (HOXA7), mRNA  |
| NM_007045 | Homo sapiens FGFR1 oncogene partner (FOP), mRNA  |
| NM_007051 | Homo sapiens Fas (TNFRSF6) associated factor 1 (FAF1), mRNA  |
| NM_006979 | Homo sapiens HLA class II region expressed gene KE4 (HKE4), mRNA   |
| NM_007015 | Homo sapiens chondromodulin I precursor (CHM-I), mRNA  |
| NM_006890 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 7 (CEACAM7), mRNA                                 |
| NM_007018 | Homo sapiens centrosomal protein 1 (CEP1), mRNA  |
| NM_006889 | Homo sapiens CD86 antigen (CD28 antigen ligand 2, B7-2 antigen) (CD86), mRNA   |
| NM_006982 | Homo sapiens cartilage paired-class homeoprotein 1 (CART1), mRNA   |
| NM_007058 | Homo sapiens calpain 11 (CAPN11), mRNA   |
| NM_006888 | Homo sapiens calmodulin 1 (phosphorylase kinase, delta) (CALM1), mRNA  |
| NM_007047 | Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA   |
| NM_007048 | Homo sapiens butyrophilin, subfamily 3, member A1 (BTN3A1), mRNA   |
| NM_006992 | Homo sapiens B7 protein (B7), mRNA   |
| NM_006885 | Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA   |
| NM_007022 | Homo sapiens putative tumor suppressor (101F6), mRNA   |
| NM_006697 | Homo sapiens cisplatin resistance associated (CRA), mRNA   |
| NM_006826 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide (YWHAQ), mRNA   |
| NM_006761 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide (YWHAQ), mRNA |
| NM_006784 | Homo sapiens WD repeat domain 3 (WDR3), mRNA   |
| NM_006846 | Homo sapiens serine protease inhibitor, Kazal type, 5 (SPINK5), mRNA   |
| NM_006830 | Homo sapiens ubiquinol-cytochrome c reductase (6.4kD) subunit (UQCR), mRNA   |
| NM_006798 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide A1 (UGT2A1), mRNA   |
| NM_006757 | Homo sapiens troponin T3, skeletal, fast (TNNT3), mRNA   |
| NM_006827 | Homo sapiens transmembrane trafficking protein (TMP21), mRNA   |
| NM_006853 | Homo sapiens kallikrein 11 (KLK11), mRNA   |
| NM_006811 | Homo sapiens tumor differentially expressed 1 (TDE1), mRNA   |
| NM_006756 | Homo sapiens transcription elongation factor A (SII), 1 (TCEA1), mRNA  |
| NM_006024 | Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA                               |
| NM_006752 | Homo sapiens surfactant 5 (SURF5), mRNA  |
| NM_006819 | Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (STIP1), mRNA                            |
| NM_006780 | Homo sapiens SMA3 (SMA3), mRNA   |
| NM_006749 | Homo sapiens solute carrier family 20 (phosphate transporter), member 2 (SLC20A2), mRNA                                |
| NM_006747 | Homo sapiens signal-induced proliferation-associated gene 1 (SIPA1), mRNA  |
| NM_006873 | Homo sapiens stoned B/TfIIA-alpha/beta-like factor (SALF), mRNA  |
| NM_006788 | Homo sapiens ralA binding protein 1 (RALBP1), mRNA   |
| NM_006871 | Homo sapiens receptor-interacting serine-threonine kinase 3 (RIPK3), mRNA  |
| NM_006867 | Homo sapiens RNA-binding protein gene with multiple splicing (RBPM3), mRNA   |
| NM_006743 | Homo sapiens RNA binding motif protein 3 (RBM3), mRNA  |

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| NM_006868 | Homo sapiens RAB31, member RAS oncogene family (RAB31), mRNA   |
| NM_006839 | Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA  |
| NM_006812 | Homo sapiens amplified in osteosarcoma (OS-9), mRNA  |
| NM_006656 | Homo sapiens sialidase 3 (membrane sialidase) (NEU3), mRNA   |
| NM_006791 | Homo sapiens MORF-related gene 15 (MRG15), mRNA  |
| NM_006766 | Homo sapiens zinc finger protein 220 (ZNF220), mRNA  |
| NM_006804 | Homo sapiens steroidogenic acute regulatory protein related (MLN64), mRNA  |
| NM_006770 | Homo sapiens macrophage receptor with collagenous structure (MARCO), mRNA  |
| NM_006785 | Homo sapiens mucosa associated lymphoid tissue lymphoma translocation gene 1 (MALT1), mRNA                           |
| NM_006767 | Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA  |
| NM_006840 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA |
| NM_006866 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA           |
| NM_006863 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA           |
| NM_006847 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 4 (LILRB4), mRNA |
| NM_006865 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (without TM domain), member 3 (LILRA3), mRNA        |
| NM_006864 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA |
| NM_006738 | Homo sapiens lymphoid blast crisis oncogene (LBC), mRNA  |
| NM_006762 | Homo sapiens Lysosomal-associated multispinning membrane protein-5 (LAPTM5), mRNA                                    |
| NM_006737 | Homo sapiens killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 2 (KIR3DL2), mRNA       |
| NM_006801 | Homo sapiens KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1 (KDELRL1), mRNA               |
| NM_006844 | Homo sapiens ilvB (bacterial acetolactate synthase)-like (ILVBL), mRNA   |
| NM_006858 | Homo sapiens putative T1/ST2 receptor binding protein (IL1RL1LG), mRNA   |
| NM_006764 | Homo sapiens interferon-related developmental regulator 2 (IFRD2), mRNA  |
| NM_006831 | Homo sapiens ATP/GTP-binding protein (HEAB), mRNA  |
| NM_006794 | Homo sapiens G protein-coupled receptor 75 (GPR75), mRNA   |
| NM_006783 | Homo sapiens gap junction protein, beta 6 (connexin 30) (GJB6), mRNA   |
| NM_006733 | Homo sapiens FSH primary response (LRPR1, rat) homolog 1 (FSHPRH1), mRNA   |
| NM_006731 | Homo sapiens Fukuyama type congenital muscular dystrophy (FCMD), mRNA  |
| NM_006730 | Homo sapiens deoxyribonuclease I-like 1 (DNASE1L1), mRNA   |
| NM_004366 | Homo sapiens chloride channel 2 (CLCN2), mRNA  |
| NM_006725 | Homo sapiens CD6 antigen (CD6), mRNA   |
| NM_006806 | Homo sapiens BTG family, member 3 (BTG3), mRNA   |
| NM_006763 | Homo sapiens BTG family, member 2 (BTG2), mRNA   |
| NM_006789 | Homo sapiens apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 2 (APOBEC2), mRNA                      |
| NM_006793 | Homo sapiens peroxiredoxin 3 (PRDX3), nuclear gene encoding mitochondrial protein, mRNA                              |
| NM_006818 | Homo sapiens ALL1-fused gene from chromosome 1q (AF1Q), mRNA   |
| NM_004289 | Homo sapiens nuclear factor (erythroid-derived 2)-like 3 (NFE2L3), mRNA  |

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| NM_006526 | Homo sapiens zinc finger protein 217 (ZNF217), mRNA   |
| NM_006523 | Homo sapiens X-prolyl aminopeptidase (aminopeptidase P)-like (XPNPEPL), mRNA  |
| NM_006537 | Homo sapiens ubiquitin specific protease 3 (USP3), mRNA   |
| NM_006564 | Homo sapiens G protein-coupled receptor (TYMSTR), mRNA  |
| NM_006573 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13B), mRNA                                      |
| NM_001561 | Homo sapiens tumor necrosis factor receptor superfamily, member 9 (TNFRSF9), mRNA   |
| NM_006528 | Homo sapiens tissue factor pathway inhibitor 2 (TFPI2), mRNA  |
| NM_006520 | Homo sapiens t-complex-associated-testis-expressed 1-like (TCTE1L), mRNA  |
| NM_006519 | Homo sapiens t-complex-associated-testis-expressed 1-like 1 (TCTEL1), mRNA  |
| NM_006602 | Homo sapiens transcription factor-like 5 (basic helix-loop-helix) (TCFL5), mRNA   |
| NM_006593 | Homo sapiens T-box, brain, 1 (TBR1), mRNA   |
| NM_006679 | Homo sapiens putative opioid receptor, neuromedin K (neurokinin B) receptor-like (TAC3RL), mRNA                           |
| NM_006682 | Homo sapiens fibrinogen-like 2 (FGL2), mRNA   |
| NM_006558 | Homo sapiens Sam68-like phosphotyrosine protein, T-STAR (T-STAR), mRNA  |
| NM_006603 | Homo sapiens stromal antigen 2 (STAG2), mRNA  |
| NM_006717 | Homo sapiens spindlin (SPIN), mRNA  |
| NM_006542 | Homo sapiens S-phase response (cyclin-related) (SPHAR), mRNA  |
| NM_006654 | Homo sapiens sucl-associated neurotrophic factor target (FGFR signalling adaptor) (SNT-1), mRNA                           |
| NM_006622 | Homo sapiens serum-inducible kinase (SNK), mRNA   |
| NM_006696 | Homo sapiens thyroid hormone receptor coactivating protein (SMAP), mRNA   |
| NM_006516 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 1 (SLC2A1), mRNA                           |
| NM_006632 | Homo sapiens solute carrier family 17 (sodium phosphate), member 3 (SLC17A3), mRNA  |
| NM_006517 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 2 (putative transporter) (SLC16A2), mRNA |
| NM_006598 | Homo sapiens solute carrier family 12 (potassium/chloride transporters), member 7 (SLC12A7), mRNA                         |
| NM_006515 | Homo sapiens SET domain and mariner transposase fusion gene (SETMAR), mRNA  |
| NM_006664 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 27 (SCYA27), mRNA                                     |
| NM_006514 | Homo sapiens sodium channel, voltage-gated, type X, alpha polypeptide (SCN10A), mRNA                                      |
| NM_006559 | Homo sapiens GAP-associated tyrosine phosphoprotein p62 (Sam68) (SAM68), mRNA   |
| NM_006511 | Homo sapiens regulatory solute carrier protein, family 1, member 1 (RSC1A1), mRNA   |
| NM_006583 | Homo sapiens retinal pigment epithelium-derived rhodopsin homolog (RRH), mRNA   |
| NM_006604 | Homo sapiens ret finger protein-like 3 (RFPL3), mRNA  |
| NM_006605 | Homo sapiens ret finger protein-like 2 (RFPL2), mRNA  |
| NM_006505 | Homo sapiens poliovirus receptor (PVR), mRNA  |
| NM_006504 | Homo sapiens protein tyrosine phosphatase, receptor type, E (PTPRE), mRNA   |
| NM_006503 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4), mRNA   |

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| NM_006587 | Homo sapiens corin (PRSC), mRNA  |
| NM_006556 | Homo sapiens phosphomevalonate kinase (PMVK), mRNA   |
| NM_006608 | Homo sapiens putative homeodomain transcription factor (PHTF1), mRNA   |
| NM_006661 | Homo sapiens phosphodiesterase 10A (PDE10A), mRNA  |
| NM_006674 | Homo sapiens MHC class I region ORF (P5-1), mRNA   |
| NM_006637 | Homo sapiens olfactory receptor, family 5, subfamily I, member 1 (OR511), mRNA                                       |
| NM_006649 | Homo sapiens serologically defined colon cancer antigen 16 (SDCCAG16), mRNA  |
| NM_002532 | Homo sapiens nucleoporin 88kD (NUP88), mRNA  |
| NM_006702 | Homo sapiens neuropathy target esterase (NTE), mRNA  |
| NM_006693 | Homo sapiens cleavage and polyadenylation specific factor 4, 30kD subunit (CPSF4), mRNA                              |
| NM_006669 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1 (LILRB1), mRNA |
| NM_006533 | Homo sapiens melanoma inhibitory activity (MIA), mRNA  |
| NM_006500 | Homo sapiens melanoma adhesion molecule (MCAM), mRNA   |
| NM_006610 | Homo sapiens mannan-binding lectin serine protease 2 (MASP2), mRNA   |
| NM_006699 | Homo sapiens mannosidase, alpha, class 1A, member 2 (MAN1A2), mRNA   |
| NM_006498 | Homo sapiens lectin, galactoside-binding, soluble, 2 (galectin 2) (LGALS2), mRNA                                     |
| NM_006547 | Homo sapiens IGF-II mRNA-binding protein 3 (KOC1), mRNA  |
| NM_006611 | Homo sapiens killer cell lectin-like receptor subfamily A, member 1 (KLRA1), mRNA                                    |
| NM_006546 | Homo sapiens IGF-II mRNA-binding protein 1 (IMP-1), mRNA   |
| NM_006665 | Homo sapiens heparanase (HPSE), mRNA   |
| NM_006497 | Homo sapiens hypermethylated in cancer 1 (HIC1), mRNA  |
| NM_004667 | Homo sapiens hect domain and RLD 2 (HERC2), mRNA   |
| NM_006527 | Homo sapiens Hairpin binding protein, histone (HBP), mRNA  |
| NM_006658 | Homo sapiens G-substrate (GSBS), mRNA  |
| NM_006496 | Homo sapiens guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 3 (GNAI3), mRNA   |
| NM_006529 | Homo sapiens glycine receptor, alpha 3 (GLRA3), mRNA   |
| NM_006530 | Homo sapiens glioma-amplified sequence-41 (GAS41), mRNA  |
| NM_006581 | Homo sapiens fucosyltransferase 9 (alpha (1,3) fucosyltransferase) (FUT9), mRNA                                      |
| NM_006700 | Homo sapiens FLN29 gene product (FLN29), mRNA  |
| NM_006684 | Homo sapiens complement factor H-related 4 (FHR-4), mRNA   |
| NM_004113 | Homo sapiens fibroblast growth factor 12B (FGF12B), mRNA   |
| NM_006495 | Homo sapiens ecotropic viral integration site 2B (EVI2B), mRNA   |
| NM_006532 | Homo sapiens ELL gene (11-19 lysine-rich leukemia gene) (ELL), mRNA  |
| NM_006566 | Homo sapiens adhesion glycoprotein (DNAM-1), mRNA  |
| NM_006639 | Homo sapiens cysteinyl leukotriene receptor 1 (CYSLT1), mRNA   |
| NM_006586 | Homo sapiens trinucleotide repeat containing 5 (TNRC5), mRNA   |
| NM_006565 | Homo sapiens CCCTC-binding factor (zinc finger protein) (CTCF), mRNA   |
| NM_006574 | Homo sapiens chondroitin sulfate proteoglycan 5 (neuroglycan C) (CSPG5), mRNA  |
| NM_006688 | Homo sapiens C1q-related factor (CRF), mRNA  |
| NM_006493 | Homo sapiens ceroid-lipofuscinosis, neuronal 5 (CLN5), mRNA  |
| NM_001750 | Homo sapiens calpastatin (CAST), mRNA  |
| NM_006624 | Homo sapiens adenovirus 5 E1A binding protein (BS69), mRNA   |
| NM_006698 | Homo sapiens bladder cancer associated protein (BLCAP), mRNA   |

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| NM_006716 | Homo sapiens activator of S phase kinase (ASK), mRNA   |
| NM_006534 | Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA  |
| NM_006670 | Homo sapiens 5T4 oncofetal trophoblast glycoprotein (5T4), mRNA  |
| NM_002069 | Homo sapiens guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 1 (GNAI1), mRNA |
| NM_001165 | Homo sapiens baculoviral IAP repeat-containing 3 (BIRC3), mRNA   |
| NM_000391 | Homo sapiens ceroid-lipofuscinosis, neuronal 2, late infantile (Jansky-Bielschowsky disease) (CLN2), mRNA          |
| NM_005440 | Homo sapiens GTP-binding protein Rho7 (RHO7), mRNA   |
| NM_005346 | Homo sapiens heat shock 70kD protein 1B (HSPA1B), mRNA   |
| NM_005345 | Homo sapiens heat shock 70kD protein 1A (HSPA1A), mRNA   |
| NM_003545 | Homo sapiens H4 histone family, member J (H4FJ), mRNA  |
| NM_003543 | Homo sapiens H4 histone family, member H (H4FH), mRNA  |
| NM_003542 | Homo sapiens H4 histone family, member G (H4FG), mRNA  |
| NM_003540 | Homo sapiens H4 histone family, member C (H4FC), mRNA  |
| NM_003539 | Homo sapiens H4 histone family, member B (H4FB), mRNA  |
| NM_003538 | Homo sapiens H4 histone family, member A (H4FA), mRNA  |
| NM_005323 | Homo sapiens H1 histone family, member T (testis-specific) (H1FT), mRNA  |
| NM_003752 | Homo sapiens eukaryotic translation initiation factor 3, subunit 8 (110kD) (EIF3S8), mRNA                          |
| NM_004929 | Homo sapiens calbindin 1, (28kD) (CALB1), mRNA   |
| NM_006122 | Homo sapiens mannosidase, alpha, class 2A, member 2 (MAN2A2), mRNA   |
| NM_006301 | Homo sapiens mitogen-activated protein kinase kinase kinase 12 (MAP3K12), mRNA                                     |
| NM_006299 | Homo sapiens zinc finger protein 193 (ZNF193), mRNA  |
| NM_006298 | Homo sapiens zinc finger protein 192 (ZNF192), mRNA  |
| NM_006385 | Homo sapiens zinc finger protein 211 (ZNF211), mRNA  |
| NM_006296 | Homo sapiens vaccinia related kinase 2 (VRK2), mRNA  |
| NM_006295 | Homo sapiens valyl-tRNA synthetase 2 (VARS2), mRNA   |
| NM_006447 | Homo sapiens ubiquitin specific protease 16 (USP16), mRNA  |
| NM_006294 | Homo sapiens ubiquinol-cytochrome c reductase binding protein (UQCRB), mRNA  |
| NM_006293 | Homo sapiens TYRO3 protein tyrosine kinase (TYRO3), mRNA   |
| NM_006311 | Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA   |
| NM_006291 | Homo sapiens tumor necrosis factor, alpha-induced protein 2 (TNFAIP2), mRNA  |
| NM_006290 | Homo sapiens tumor necrosis factor, alpha-induced protein 3 (TNFAIP3), mRNA  |
| NM_006288 | Homo sapiens Thy-1 cell surface antigen (THY1), mRNA   |
| NM_006286 | Homo sapiens transcription factor Dp-2 (E2F dimerization partner 2) (TFDP2), mRNA                                  |
| NM_006284 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, H, 30kD (TAF2H), mRNA            |
| NM_006342 | Homo sapiens transforming, acidic coiled-coil containing protein 3 (TACC3), mRNA                                   |
| NM_006283 | Homo sapiens transforming, acidic coiled-coil containing protein 1 (TACC1), mRNA                                   |
| NM_006282 | Homo sapiens serine/threonine kinase 4 (STK4), mRNA  |
| NM_006280 | Homo sapiens signal sequence receptor, delta (translocon-associated protein delta) (SSR4), mRNA                    |
| NM_006307 | Homo sapiens sushi-repeat-containing protein, X chromosome (SRPX), mRNA  |
| NM_006415 | Homo sapiens serine palmitoyltransferase, long chain base subunit 1 (SPTLC1), mRNA                                 |

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| NM_006450 | Homo sapiens splicing factor (45kD) (SPF45), mRNA  |
| NM_006422 | Homo sapiens A kinase (PRKA) anchor protein 3 (AKAP3), mRNA  |
| NM_006446 | Homo sapiens solute carrier family 21 (organic anion transporter), member 6 (SLC21A6), mRNA  |
| NM_006278 | Homo sapiens sialyltransferase 4C (beta-galactosidase alpha-2,3-sialyltransferase) (SIAT4C), mRNA  |
| NM_006378 | Homo sapiens sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D (SEMA4D), mRNA |
| NM_006379 | Homo sapiens sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C (SEMA3C), mRNA                           |
| NM_006274 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 19 (SCYA19), mRNA  |
| NM_006453 | Homo sapiens transducin (beta)-like 3 (TBL3), mRNA   |
| NM_006270 | Homo sapiens related RAS viral (r-ras) oncogene homolog (RRAS), mRNA   |
| NM_006269 | Homo sapiens retinitis pigmentosa 1 (autosomal dominant) (RPI1), mRNA  |
| NM_006355 | Homo sapiens ring finger protein 15 (RNF15), mRNA  |
| NM_006315 | Homo sapiens ring finger protein 3 (RNF3), mRNA  |
| NM_006394 | Homo sapiens regulated in glioma (RIG), mRNA   |
| NM_006263 | Homo sapiens proteasome (prosome, macropain) activator subunit 1 (PA28 alpha) (PSME1), mRNA  |
| NM_006262 | Homo sapiens peripherin (PRPH), mRNA   |
| NM_006261 | Homo sapiens prophet of Pit1, paired-like homeodomain transcription factor (PROP1), mRNA   |
| NM_006260 | Homo sapiens protein-kinase, interferon-inducible double stranded RNA dependent inhibitor (PRKRI), mRNA                                      |
| NM_006259 | Homo sapiens protein kinase, cGMP-dependent, type II (PRKG2), mRNA   |
| NM_006257 | Homo sapiens protein kinase C, theta (PRKCQ), mRNA   |
| NM_006255 | Homo sapiens protein kinase C, eta (PRKCH), mRNA   |
| NM_006253 | Homo sapiens protein kinase, AMP-activated, beta 1 non-catalytic subunit (PRKAB1), mRNA  |
| NM_006252 | Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA   |
| NM_006251 | Homo sapiens protein kinase, AMP-activated, alpha 1 catalytic subunit (PRKAA1), mRNA   |
| NM_006247 | Homo sapiens protein phosphatase 5, catalytic subunit (PPP5C), mRNA  |
| NM_006246 | Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PPP2R5E), mRNA  |
| NM_006245 | Homo sapiens protein phosphatase 2, regulatory subunit B (B56), delta isoform (PPP2R5D), mRNA  |
| NM_006244 | Homo sapiens protein phosphatase 2, regulatory subunit B (B56), beta isoform (PPP2R5B), mRNA   |
| NM_006243 | Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A), mRNA  |
| NM_006241 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 2 (PPP1R2), mRNA  |
| NM_006240 | Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1), mRNA   |
| NM_006238 | Homo sapiens peroxisome proliferative activated receptor, delta (PPARD), mRNA  |
| NM_006237 | Homo sapiens POU domain, class 4, transcription factor 1 (POU4F1), mRNA  |

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| NM_006236 | Homo sapiens POU domain, class 3, transcription factor 3 (POU3F3), mRNA   |
| NM_006235 | Homo sapiens POU domain, class 2, associating factor 1 (POU2AF1), mRNA  |
| NM_006231 | Homo sapiens polymerase (DNA directed), epsilon (POLE), mRNA  |
| NM_006358 | Homo sapiens solute carrier family 25 (mitochondrial carrier; peroxisomal membrane protein, 34kD), member 17 (SLC25A17), mRNA |
| NM_006227 | Homo sapiens phospholipid transfer protein (PLTP), mRNA   |
| NM_006226 | Homo sapiens phospholipase C, epsilon (PLCE), mRNA  |
| NM_006225 | Homo sapiens phospholipase C, delta 1 (PLCD1), mRNA   |
| NM_006224 | Homo sapiens phosphatidylinositol transfer protein (PITPN), mRNA  |
| NM_006479 | Homo sapiens RAD51-interacting protein (PIR51), mRNA  |
| NM_006223 | Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting, 4 (parvulin) (PIN4), mRNA                        |
| NM_006222 | Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1-like (PIN1L), mRNA                              |
| NM_006221 | Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA                                    |
| NM_006218 | Homo sapiens phosphoinositide-3-kinase, catalytic, alpha polypeptide (PIK3CA), mRNA   |
| NM_006213 | Homo sapiens phosphorylase kinase, gamma 1 (muscle) (PHKG1), mRNA   |
| NM_006305 | Homo sapiens putative human HLA class II associated protein I (PHAP1), mRNA   |
| NM_006212 | Homo sapiens 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2 (PFKFB2), mRNA   |
| NM_006211 | Homo sapiens proenkephalin (PENK), mRNA   |
| NM_006209 | Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin) (ENPP2), mRNA                                     |
| NM_006205 | Homo sapiens phosphodiesterase 6H, cGMP-specific, cone, gamma (PDE6H), mRNA   |
| NM_006204 | Homo sapiens phosphodiesterase 6C, cGMP-specific, cone, alpha prime (PDE6C), mRNA   |
| NM_006198 | Homo sapiens Purkinje cell protein 4 (PCP4), mRNA   |
| NM_006197 | Homo sapiens pericentriolar material 1 (PCM1), mRNA   |
| NM_006195 | Homo sapiens pre-B-cell leukemia transcription factor 3 (PBX3), mRNA  |
| NM_006193 | Homo sapiens paired box gene 4 (PAX4), mRNA   |
| NM_006191 | Homo sapiens proliferation-associated 2G4, 38kD (PA2G4), mRNA   |
| NM_006189 | Homo sapiens olfactory marker protein (OMP), mRNA   |
| NM_006186 | Homo sapiens nuclear receptor subfamily 4, group A, member 2 (NR4A2), mRNA  |
| NM_006185 | Homo sapiens nuclear mitotic apparatus protein 1 (NUMA1), mRNA  |
| NM_006184 | Homo sapiens nucleobindin 1 (NUCB1), mRNA   |
| NM_006182 | Homo sapiens discoidin domain receptor family, member 2 (DDR2), mRNA  |
| NM_006180 | Homo sapiens neurotrophic tyrosine kinase, receptor, type 2 (NTRK2), mRNA   |
| NM_006372 | Homo sapiens NS1-associated protein 1 (NSAP1), mRNA   |
| NM_006177 | Homo sapiens neural retina leucine zipper (NRL), mRNA   |
| NM_006176 | Homo sapiens neurogranin (protein kinase C substrate, RC3) (NRGN), mRNA   |
| NM_006174 | Homo sapiens neuropeptide Y receptor Y5 (NPY5R), mRNA   |
| NM_006170 | Homo sapiens nucleolar protein 1 (120kD) (NOL1), mRNA   |
| NM_006169 | Homo sapiens nicotinamide N-methyltransferase (NNMT), mRNA  |
| NM_006165 | Homo sapiens nuclear factor related to kappa B binding protein (NFRKB), mRNA  |
| NM_006164 | Homo sapiens nuclear factor (erythroid-derived 2)-like 2 (NFE2L2), mRNA   |
| NM_006163 | Homo sapiens nuclear factor (erythroid-derived 2), 45kD (NFE2), mRNA  |



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| NM_006160 | Homo sapiens neurogenic differentiation 2 (NEUROD2), mRNA  |
| NM_006158 | Homo sapiens neurofilament, light polypeptide (68kD) (NEFL), mRNA  |
| NM_006393 | Homo sapiens nebulin (NEBL), mRNA  |
| NM_006316 | Homo sapiens DNA-binding transcriptional activator (NCYM), mRNA  |
| NM_006153 | Homo sapiens NCK adaptor protein 1 (NCK1), mRNA  |
| NM_006424 | Homo sapiens solute carrier family 34 (sodium phosphate), member 2 (SLC34A2), mRNA                                     |
| NM_006317 | Homo sapiens brain acid-soluble protein 1 (BASP1), mRNA  |
| NM_006343 | Homo sapiens c-met proto-oncogene tyrosine kinase (MERTK), mRNA  |
| NM_006457 | Homo sapiens LIM protein (similar to rat protein kinase C-binding enigma) (LIM), mRNA                                  |
| NM_006148 | Homo sapiens LIM and SH3 protein 1 (LASP1), mRNA   |
| NM_006383 | Homo sapiens DNA-dependent protein kinase catalytic subunit-interacting protein 2 (KIP2), mRNA                         |
| NM_006459 | Homo sapiens similar to Caenorhabditis elegans protein C42C1.9 (KEO4), mRNA  |
| NM_006147 | Homo sapiens interferon regulatory factor 6 (IRF6), mRNA   |
| NM_006332 | Homo sapiens interferon, gamma-inducible protein 30 (IFI30), mRNA  |
| NM_006337 | Homo sapiens microspherule protein 1 (MCRS1), mRNA   |
| NM_006308 | Homo sapiens heat shock 27kD protein 3 (HSPB3), mRNA   |
| NM_006403 | Homo sapiens enhancer of filamentation 1 (cas-like docking; Crk-associated substrate related) (HEF1), mRNA             |
| NM_006143 | Homo sapiens G protein-coupled receptor 19 (GPR19), mRNA   |
| NM_006302 | Homo sapiens glucosidase I (GCSI), mRNA  |
| NM_006478 | Homo sapiens GAS2-related on chromosome 22 (GAR22), mRNA   |
| NM_006338 | Homo sapiens glioma amplified on chromosome 1 protein (leucine-rich) (GAC1), mRNA                                      |
| NM_006360 | Homo sapiens dendritic cell protein (GA17), mRNA   |
| NM_006329 | Homo sapiens fibulin 5 (FBLN5), mRNA   |
| NM_006404 | Homo sapiens protein C receptor, endothelial (EPCR) (PROCR), mRNA  |
| NM_006304 | Homo sapiens Deleted in split-hand/split-foot 1 region (DSS1), mRNA  |
| NM_001355 | Homo sapiens D-dopachrome tautomerase (DDT), mRNA  |
| NM_006139 | Homo sapiens CD28 antigen (Tp44) (CD28), mRNA  |
| NM_006371 | Homo sapiens cartilage associated protein (CRTAP), mRNA  |
| NM_006136 | Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA                                    |
| NM_006448 | Homo sapiens trinucleotide repeat containing 1 (TNRC1), mRNA   |
| NM_006333 | Homo sapiens nuclear DNA-binding protein (C1D), mRNA   |
| NM_006419 | Homo sapiens small inducible cytokine B subfamily (Cys-X-Cys motif), member 13 (B-cell chemoattractant) (SCYB13), mRNA |
| NM_005453 | Homo sapiens zinc finger protein 297 (ZNF297), mRNA  |
| NM_006324 | Homo sapiens craniofacial development protein 1 (CFDPI), mRNA  |
| NM_006375 | Homo sapiens cytosolic ovarian carcinoma antigen 1 (COVA1), mRNA   |
| NM_004466 | Homo sapiens glypican 5 (GPC5), mRNA   |
| NM_004484 | Homo sapiens glypican 3 (GPC3), mRNA   |
| NM_002856 | Homo sapiens poliovirus receptor-related 2 (herpesvirus entry mediator B) (PVRL2), mRNA                                |
| NM_001420 | Homo sapiens ELAV (embryonic lethal, abnormal vision, Drosophila)-like 3 (Hu antigen C) (ELAVL3), mRNA                 |
| NM_001634 | Homo sapiens S-adenosylmethionine decarboxylase 1 (AMD1), mRNA   |
| NM_000483 | Homo sapiens apolipoprotein C-II (APOC2), mRNA   |
| NM_001645 | Homo sapiens apolipoprotein C-I (APOC1), mRNA  |

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| NM_000482 | Homo sapiens apolipoprotein A-IV (APOA4), mRNA   |
| NM_005953 | Homo sapiens metallothionein 2A (MT2A), mRNA   |
| NM_005954 | Homo sapiens metallothionein 3 (growth inhibitory factor (neurotrophic)) (MT3), mRNA   |
| NM_006007 | Homo sapiens zinc finger protein 216 (ZNF216), mRNA  |
| NM_006006 | Homo sapiens zinc finger protein 145 (Krueppel-like, expressed in promyelocytic leukemia) (ZNF145), mRNA                                     |
| NM_006004 | Homo sapiens ubiquinol-cytochrome c reductase hinge protein (UQCRH), mRNA  |
| NM_006003 | Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRFS1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_006088 | Homo sapiens tubulin, beta, 2 (TUBB2), mRNA  |
| NM_005999 | Homo sapiens translin-associated factor X (TSNAX), mRNA  |
| NM_006022 | Homo sapiens transforming growth factor beta-stimulated protein TSC-22 (TSC22), mRNA   |
| NM_005998 | Homo sapiens chaperonin containing TCP1, subunit 3 (gamma) (CCT3), mRNA  |
| NM_006073 | Homo sapiens triadin (TRDN), mRNA  |
| NM_005997 | Homo sapiens transcription factor-like 1 (TCFL1), mRNA   |
| NM_006116 | Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA   |
| NM_005989 | Homo sapiens aldo-keto reductase family 1, member D1 (delta 4-3-ketosteroid-5-beta-reductase) (AKR1D1), mRNA                                 |
| NM_005988 | Homo sapiens small proline-rich protein 2A (SPRR2A), mRNA  |
| NM_005986 | Homo sapiens SRY (sex determining region Y)-box 1 (SOX1), mRNA   |
| NM_006049 | Homo sapiens small nuclear RNA activating complex, polypeptide 5, 19kD (SNAPC5), mRNA  |
| NM_006080 | Homo sapiens sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (SEMA3A), mRNA                           |
| NM_006072 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 26 (SCYA26), mRNA  |
| NM_005981 | Homo sapiens sarcoma amplified sequence (SAS), mRNA  |
| NM_006054 | Homo sapiens reticulon 3 (RTN3), mRNA  |
| NM_005977 | Homo sapiens ring finger protein (C3H2C3 type) 6 (RNF6), mRNA  |
| NM_005975 | Homo sapiens PTK6 protein tyrosine kinase 6 (PTK6), mRNA   |
| NM_005972 | Homo sapiens pancreatic polypeptide receptor 1 (PPYR1), mRNA   |
| NM_006112 | Homo sapiens peptidylprolyl isomerase E (cyclophilin E) (PPIE), mRNA   |
| NM_006107 | Homo sapiens acid-inducible phosphoprotein (OA48-18), mRNA   |
| NM_006067 | Homo sapiens neighbor of COX4 (NOC4), mRNA   |
| NM_005969 | Homo sapiens nucleosome assembly protein 1-like 4 (NAP1L4), mRNA   |
| NM_006058 | Homo sapiens Nef-associated factor 1 (NAF1), mRNA  |
| NM_006097 | Homo sapiens myosin regulatory light chain 2, smooth muscle isoform (MYRL2), mRNA  |
| NM_005955 | Homo sapiens metal-regulatory transcription factor 1 (MTF1), mRNA  |
| NM_005932 | Homo sapiens mitochondrial intermediate peptidase (MIPEP), nuclear gene encoding mitochondrial protein, mRNA                                 |
| NM_005931 | Homo sapiens MHC class I polypeptide-related sequence B (MICB), mRNA   |
| NM_006081 | Homo sapiens MHC binding factor, beta (MHCBBF), mRNA   |
| NM_005930 | Homo sapiens meningioma expressed antigen 6 (coiled-coil proline-rich) (MGEA6), mRNA   |
| NM_005928 | Homo sapiens milk fat globule-EGF factor 8 protein (MFGE8), mRNA   |
| NM_005926 | Homo sapiens microfibrillar-associated protein 1 (MFAP1), mRNA   |
| NM_005925 | Homo sapiens meprin A, beta (MEP1B), mRNA  |

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| NM_005924 | Homo sapiens mesenchyme homeo box 2 (growth arrest-specific homeo box) (MEOX2), mRNA   |
| NM_005920 | Homo sapiens MADS box transcription enhancer factor 2, polypeptide D (myocyte enhancer factor 2D) (MEF2D), mRNA                |
| NM_005919 | Homo sapiens MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B), mRNA                |
| NM_005918 | Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial protein, mRNA             |
| NM_005917 | Homo sapiens malate dehydrogenase 1, NAD (soluble) (MDH1), mRNA  |
| NM_005913 | Homo sapiens melanocortin 5 receptor (MC5R), mRNA  |
| NM_005912 | Homo sapiens melanocortin 4 receptor (MC4R), mRNA  |
| NM_005911 | Homo sapiens methionine adenosyltransferase II, alpha (MAT2A), mRNA  |
| NM_005908 | Homo sapiens mannosidase, beta A, lysosomal (MANBA), mRNA  |
| NM_005907 | Homo sapiens mannosidase, alpha, class 1A, member 1 (MAN1A1), mRNA   |
| NM_005898 | Homo sapiens membrane component, chromosome 11, surface marker 1 (M11S1), mRNA   |
| NM_006060 | Homo sapiens zinc finger protein, subfamily 1A, 1 (Ikaro) (ZNFN1A1), mRNA  |
| NM_006059 | Homo sapiens laminin, gamma 3 (LAMC3), mRNA  |
| NM_006038 | Homo sapiens spermatogenesis associated PD1 (KIAA0757), mRNA   |
| NM_006084 | Homo sapiens interferon-stimulated transcription factor 3, gamma (48kD) (ISGF3G), mRNA   |
| NM_005897 | Homo sapiens intracisternal A particle-promoted polypeptide (IPP), mRNA  |
| NM_005896 | Homo sapiens isocitrate dehydrogenase 1 (NADP+), soluble (IDH1), mRNA  |
| NM_006028 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 3B (HTR3B), mRNA   |
| NM_006120 | Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA), mRNA  |
| NM_006026 | Homo sapiens H1 histone family, member X (H1FX), mRNA  |
| NM_006051 | Homo sapiens FE65-LIKE 2 (FE65L2), mRNA  |
| NM_006079 | Homo sapiens Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 (CITED2), mRNA                  |
| NM_005894 | Homo sapiens CD5 antigen-like (scavenger receptor cysteine rich family) (CD5L), mRNA   |
| NM_006016 | Homo sapiens CD164 antigen, sialomucin (CD164), mRNA   |
| NM_006078 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 2 (CACNG2), mRNA  |
| NM_006030 | Homo sapiens calcium channel, voltage-dependent, alpha 2/delta subunit 2 (CACNA2D2), mRNA                                      |
| NM_006085 | Homo sapiens 3'(2'), 5'-bisphosphate nucleotidase 1 (BPNT1), mRNA  |
| NM_006015 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily f, member 1 (SMARCF1), mRNA |
| NM_006066 | Homo sapiens aldo-keto reductase family 1, member A1 (aldehyde reductase) (AKR1A1), mRNA                                       |
| NM_005891 | Homo sapiens acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase) (ACAT2), mRNA                             |
| NM_006020 | Homo sapiens alkylation repair; alkB homolog (ABH), mRNA   |
| NM_004056 | Homo sapiens carbonic anhydrase VIII (CA8), mRNA   |
| NM_005664 | Homo sapiens makorin, ring finger protein, 3 (MKRN3), mRNA   |
| NM_005662 | Homo sapiens voltage-dependent anion channel 3 (VDAC3), mRNA   |
| NM_005836 | Homo sapiens translational inhibitor protein p14.5 (UK114), mRNA   |
| NM_005660 | Homo sapiens solute carrier family 35 (UDP-galactose transporter), member 2 (SLC35A2), mRNA                                    |
| NM_005659 | Homo sapiens ubiquitin fusion degradation 1-like (UFD1L), mRNA   |

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| NM_005706 | Homo sapiens tumor suppressing subtransferable candidate 4 (TSSC4), mRNA   |
| NM_005723 | Homo sapiens tetraspan 5 (TSPAN-5), mRNA   |
| NM_005727 | Homo sapiens tetraspan 1 (TSPAN-1), mRNA   |
| NM_005658 | Homo sapiens TNF receptor-associated factor 1 (TRAF1), mRNA  |
| NM_005802 | Homo sapiens tumor protein p53-binding protein (TP53BPL), mRNA   |
| NM_005749 | Homo sapiens transducer of ERBB2, 1 (TOB1), mRNA   |
| NM_005655 | Homo sapiens TGFB inducible early growth response (TIEG), mRNA   |
| NM_005653 | Homo sapiens transcription factor CP2 (TFCP2), mRNA  |
| NM_005654 | Homo sapiens nuclear receptor subfamily 2, group F, member 1 (NR2F1), mRNA   |
| NM_005652 | Homo sapiens telomeric repeat binding factor 2 (TERF2), mRNA   |
| NM_005885 | Homo sapiens similar to S. cerevisiae SSM4 (TEB4), mRNA  |
| NM_005651 | Homo sapiens tryptophan 2,3-dioxygenase (TDO2), mRNA   |
| NM_005649 | Homo sapiens transcription factor 17 (TCF17), mRNA   |
| NM_005647 | Homo sapiens transducin (beta)-like 1 (TBL1), mRNA   |
| NM_005645 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, K, 18kD (TAF2K), mRNA              |
| NM_005643 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, I, 28kD (TAF2I), mRNA              |
| NM_005641 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, E, 70/85kD (TAF2E), mRNA           |
| NM_005679 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase I, C, 110kD (TAF1C), mRNA              |
| NM_005681 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase I, A, 48kD (TAF1A), mRNA               |
| NM_005639 | Homo sapiens synaptotagmin 1 (SYT1), mRNA  |
| NM_005638 | Homo sapiens synaptobrevin-like 1 (SYBL1), mRNA  |
| NM_005635 | Homo sapiens synovial sarcoma, X breakpoint 1 (SSX1), mRNA   |
| NM_005871 | Homo sapiens splicing factor 30, survival of motor neuron-related (SPF30), mRNA                                      |
| NM_005634 | Homo sapiens SRY (sex determining region Y)-box 3 (SOX3), mRNA   |
| NM_005686 | Homo sapiens SRY (sex determining region Y)-box 13 (SOX13), mRNA   |
| NM_005629 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, creatine), member 8 (SLC6A8), mRNA               |
| NM_005630 | Homo sapiens solute carrier family 21 (prostaglandin transporter), member 2 (SLC21A2), mRNA                          |
| NM_005628 | Homo sapiens solute carrier family 1 (neutral amino acid transporter), member 5 (SLC1A5), mRNA                       |
| NM_005627 | Homo sapiens serum/glucocorticoid regulated kinase (SGK), mRNA   |
| NM_005877 | Homo sapiens splicing factor 3a, subunit 1, 120kD (SF3A1), mRNA  |
| NM_005625 | Homo sapiens syndecan binding protein (syntenin) (SDCBP), mRNA   |
| NM_005623 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 8 (monocyte chemotactic protein 2) (SCYA8), mRNA |
| NM_005624 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 25 (SCYA25), mRNA                                |
| NM_005850 | Homo sapiens splicing factor 3b, subunit 4, 49kD (SF3B4), mRNA   |
| NM_005772 | Homo sapiens RNA cyclase homolog (RNAC), mRNA  |
| NM_005614 | Homo sapiens Ras homolog enriched in brain 2 (RHEB2), mRNA   |
| NM_005777 | Homo sapiens RNA binding motif protein 6 (RBM6), mRNA  |
| NM_005778 | Homo sapiens RNA binding motif protein 5 (RBM5), mRNA  |
| NM_005611 | Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA   |
| NM_005704 | Homo sapiens protein tyrosine phosphatase, receptor type, U (PTPRU), mRNA  |

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| NM_005607 | Homo sapiens PTK2 protein tyrosine kinase 2 (PTK2), mRNA   |
| NM_005789 | Homo sapiens proteasome (prosome, macropain) activator subunit 3 (PA28 gamma; Ki) (PSME3), mRNA                      |
| NM_005672 | Homo sapiens prostate stem cell antigen (PSCA), mRNA   |
| NM_005865 | Homo sapiens protease, serine, 16 (thymus) (PRSS16), mRNA  |
| NM_005729 | Homo sapiens peptidylprolyl isomerase F (cyclophilin F) (PIIF), mRNA   |
| NM_005604 | Homo sapiens POU domain, class 3, transcription factor 2 (POU3F2), mRNA  |
| NM_005709 | Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA  |
| NM_005767 | Homo sapiens purinergic receptor (family A group 5) (P2Y5), mRNA   |
| NM_005835 | Homo sapiens solute carrier family 17 (sodium phosphate), member 2 (SLC17A2), mRNA                                   |
| NM_005793 | Homo sapiens nucleoside diphosphate kinase type 6 (inhibitor of p53-induced apoptosis-alpha) (NM23-H6), mRNA         |
| NM_005600 | Homo sapiens nitrilase 1 (NIT1), mRNA  |
| NM_005599 | Homo sapiens nescient helix loop helix 2 (NHLH2), mRNA   |
| NM_005598 | Homo sapiens nescient helix loop helix 1 (NHLH1), mRNA   |
| NM_005596 | Homo sapiens nuclear factor I/B (NFIB), mRNA   |
| NM_005665 | Homo sapiens ecotropic viral integration site 5 (EVI5), mRNA   |
| NM_005594 | Homo sapiens nascent-polypeptide-associated complex alpha polypeptide (NACA), mRNA                                   |
| NM_005593 | Homo sapiens myogenic factor 5 (MYF5), mRNA  |
| NM_005592 | Homo sapiens muscle, skeletal, receptor tyrosine kinase (MUSK), mRNA   |
| NM_005845 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 4 (ABCC4), mRNA                                   |
| NM_005874 | Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 2 (LILRB2), mRNA |
| NM_005588 | Homo sapiens meprin A, alpha (PABA peptide hydrolase) (MEP1A), mRNA  |
| NM_005587 | Homo sapiens MADS box transcription enhancer factor 2, polypeptide A (myocyte enhancer factor 2A) (MEF2A), mRNA      |
| NM_005810 | Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA                                    |
| NM_005581 | Homo sapiens Lutheran blood group (Auberger b antigen included) (LU), mRNA   |
| NM_005578 | Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP), mRNA                             |
| NM_005577 | Homo sapiens lipoprotein, Lp(a) (LPA), mRNA  |
| NM_005576 | Homo sapiens lysyl oxidase-like 1 (LOXL1), mRNA  |
| NM_005573 | Homo sapiens lamin B1 (LMNB1), mRNA  |
| NM_005572 | Homo sapiens lamin A/C (LMNA), mRNA  |
| NM_005568 | Homo sapiens LIM homeobox protein 1 (LHX1), mRNA   |
| NM_005780 | Homo sapiens lipoma HMGIC fusion partner (LHFP), mRNA  |
| NM_005566 | Homo sapiens lactate dehydrogenase A (LDHA), mRNA  |
| NM_005564 | Homo sapiens lipocalin 2 (oncogene 24p3) (LCN2), mRNA  |
| NM_005558 | Homo sapiens ladinin 1 (LAD1), mRNA  |
| NM_005556 | Homo sapiens keratin 7 (KRT7), mRNA  |
| NM_005557 | Homo sapiens keratin 16 (focal non-epidermolytic palmoplantar keratoderma) (KRT16), mRNA                             |
| NM_005553 | Homo sapiens keratin, cuticle, ultrahigh sulphur 1 (KRN1), mRNA  |
| NM_005552 | Homo sapiens kinesin 2 (60-70kD) (KNS2), mRNA  |
| NM_005551 | Homo sapiens kallikrein 2, prostatic (KLK2), mRNA  |
| NM_005550 | Homo sapiens kinesin family member C3 (KIFC3), mRNA  |
| NM_005832 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 2 (KCNMB2), mRNA        |

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| NM_005549 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 10 (KCNA10), mRNA  |
| NM_005548 | Homo sapiens lysyl-tRNA synthetase (KARS), mRNA   |
| NM_005547 | Homo sapiens involucrin (IVL), mRNA   |
| NM_005545 | Homo sapiens immunoglobulin superfamily containing leucine-rich repeat (ISLR), mRNA   |
| NM_005853 | Homo sapiens iroquois-class homeodomain protein (IRX-2A), mRNA  |
| NM_005544 | Homo sapiens insulin receptor substrate 1 (IRS1), mRNA  |
| NM_005543 | Homo sapiens insulin-like 3 (Leydig cell) (INSL3), mRNA   |
| NM_005542 | Homo sapiens insulin induced gene 1 (INSIG1), mRNA  |
| NM_005541 | Homo sapiens inositol polyphosphate-5-phosphatase, 145kD (INPP5D), mRNA   |
| NM_005539 | Homo sapiens inositol polyphosphate-5-phosphatase, 40kD (INPP5A), mRNA  |
| NM_005537 | Homo sapiens inhibitor of growth 1 family, member 1 (ING1), mRNA  |
| NM_005535 | Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA  |
| NM_005532 | Homo sapiens interferon, alpha-inducible protein 27 (IFI27), mRNA   |
| NM_005531 | Homo sapiens interferon, gamma-inducible protein 16 (IFI16), mRNA   |
| NM_005530 | Homo sapiens isocitrate dehydrogenase 3 (NAD+) alpha (IDH3A), mRNA  |
| NM_005808 | Homo sapiens HYA22 protein (HYA22), mRNA  |
| NM_005528 | Homo sapiens heat shock 40kD protein 2 (HSPF2), mRNA  |
| NM_005526 | Homo sapiens heat shock transcription factor 1 (HSF1), mRNA   |
| NM_005525 | Homo sapiens hydroxysteroid (11-beta) dehydrogenase 1 (HSD11B1), mRNA   |
| NM_005522 | Homo sapiens homeo box A1 (HOXA1), mRNA   |
| NM_005521 | Homo sapiens homeo box 11 (T-cell lymphoma 3-associated breakpoint) (HOX11), mRNA   |
| NM_005518 | Homo sapiens 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2 (mitochondrial) (HMGCS2), mRNA  |
| NM_005515 | Homo sapiens homeo box HB9 (HLXB9), mRNA  |
| NM_005516 | Homo sapiens major histocompatibility complex, class I, E (HLA-E), mRNA   |
| NM_005712 | Homo sapiens HERV-H LTR-associating 1 (HHLA1), mRNA   |
| NM_005844 | Homo sapiens PERB11 family member in MHC class I region (HCGIX), mRNA   |
| NM_005513 | Homo sapiens general transcription factor IIE, polypeptide 1 (alpha subunit, 56kD) (GTF2E1), mRNA   |
| NM_005683 | Homo sapiens G protein-coupled receptor 55 (GPR55), mRNA  |
| NM_005684 | Homo sapiens G protein-coupled receptor 52 (GPR52), mRNA  |
| NM_005512 | Homo sapiens glycoprotein A repetitions predominant (GARP), mRNA  |
| NM_005851 | Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R), mRNA   |
| NM_005740 | Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA  |
| NM_005872 | Homo sapiens breast carcinoma amplified sequence 2 (BCAS2), mRNA  |
| NM_005671 | Homo sapiens reproduction 8 (D8S2298E), mRNA  |
| NM_005800 | Homo sapiens highly charged protein (D13S106E), mRNA  |
| NM_005752 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 1 (cartilage-derived) (CLECSF1), mRNA |
| NM_005507 | Homo sapiens cofilin 1 (non-muscle) (CFL1), mRNA  |
| NM_005825 | Homo sapiens RAS guanyl releasing protein 2 (calcium and DAG-regulated) (RASGRP2), mRNA   |
| NM_005773 | Homo sapiens zinc finger protein 256 (ZNF256), mRNA   |
| NM_005774 | Homo sapiens zinc finger protein 255 (ZNF255), mRNA   |
| NM_005504 | Homo sapiens branched chain aminotransferase 1, cytosolic (BCAT1), mRNA   |
| NM_005738 | Homo sapiens ADP-ribosylation factor-like 4 (ARL4), mRNA  |
| NM_005731 | Homo sapiens actin related protein 2/3 complex, subunit 2 (34 kD) (ARPC2), mRNA   |

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| NM_005719 | Homo sapiens actin related protein 2/3 complex, subunit 3 (21 kD) (ARPC3), mRNA   |
| NM_005883 | Homo sapiens adenomatous polyposis coli like (APCL), mRNA   |
| NM_005858 | Homo sapiens A kinase (PRKA) anchor protein 8 (AKAP8), mRNA   |
| NM_002023 | Homo sapiens fibromodulin (FMOD), mRNA  |
| NM_000108 | Homo sapiens dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD), mRNA |
| NM_001621 | Homo sapiens aryl hydrocarbon receptor (AHR), mRNA  |
| NM_001101 | Homo sapiens actin, beta (ACTB), mRNA   |
| NM_001100 | Homo sapiens actin, alpha 1, skeletal muscle (ACTA1), mRNA  |
| NM_000054 | Homo sapiens arginine vasopressin receptor 2 (nephrogenic diabetes insipidus) (AVPR2), mRNA   |
| NM_005455 | Homo sapiens zinc finger protein 265 (ZNF265), mRNA   |
| NM_005433 | Homo sapiens v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1 (YES1), mRNA  |
| NM_005429 | Homo sapiens vascular endothelial growth factor C (VEGFC), mRNA   |
| NM_005499 | Homo sapiens SUMO-1 activating enzyme subunit 2 (UBA2), mRNA  |
| NM_005427 | Homo sapiens tumor protein p73 (TP73), mRNA   |
| NM_005425 | Homo sapiens transition protein 2 (during histone to protamine replacement) (TNP2), mRNA  |
| NM_005424 | Homo sapiens tyrosine kinase with immunoglobulin and epidermal growth factor homology domains (TIE), mRNA   |
| NM_005423 | Homo sapiens trefoil factor 2 (spasmolytic protein 1) (TFF2), mRNA  |
| NM_005422 | Homo sapiens tectorin alpha (TECTA), mRNA   |
| NM_005421 | Homo sapiens T-cell acute lymphocytic leukemia 2 (TAL2), mRNA   |
| NM_005420 | Homo sapiens sulfotransferase, estrogen-preferring (STE), mRNA  |
| NM_005418 | Homo sapiens suppression of tumorigenicity 5 (ST5), mRNA  |
| NM_005470 | Homo sapiens spectrin SH3 domain binding protein 1 (SSH3BP1), mRNA  |
| NM_005416 | Homo sapiens small proline-rich protein 3 (SPRR3), mRNA   |
| NM_005460 | Homo sapiens synuclein, alpha interacting protein (synphilin) (SNCAIP), mRNA  |
| NM_005412 | Homo sapiens serine hydroxymethyltransferase 2 (mitochondrial) (SHMT2), mRNA  |
| NM_005408 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 13 (SCYA13), mRNA   |
| NM_005402 | Homo sapiens v-ras simian leukemia viral oncogene homolog A (ras related) (RALA), mRNA  |
| NM_005397 | Homo sapiens podocalyxin-like (PODXL), mRNA   |
| NM_005395 | Homo sapiens postmeiotic segregation increased 2-like 9 (PMS2L9), mRNA  |
| NM_005394 | Homo sapiens postmeiotic segregation increased 2-like 8 (PMS2L8), mRNA  |
| NM_005390 | Homo sapiens pyruvate dehydrogenase (lipoamide) alpha 2 (PDHA2), mRNA   |
| NM_005389 | Homo sapiens protein-L-isoaspartate (D-aspartate) O-methyltransferase (PCMT1), mRNA   |
| NM_005450 | Homo sapiens noggin (NOG), mRNA   |
| NM_005386 | Homo sapiens neuronatin (NNAT), mRNA  |
| NM_005384 | Homo sapiens nuclear factor, interleukin 3 regulated (NFIL3), mRNA  |
| NM_005383 | Homo sapiens sialidase 2 (cytosolic sialidase) (NEU2), mRNA   |
| NM_005382 | Homo sapiens neurofilament 3 (150kD medium) (NEF3), mRNA  |
| NM_005381 | Homo sapiens nucleolin (NCL), mRNA  |
| NM_005380 | Homo sapiens neuroblastoma, suppression of tumorigenicity 1 (NBL1), mRNA  |
| NM_005468 | Homo sapiens N-acetylated alpha-linked acidic dipeptidase-like; ILEAL DIPEPTIDYLPEPTIDASE (NAALADASEL), mRNA  |

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| NM_005374 | Homo sapiens membrane protein, palmitoylated 2 (MAGUK p55 subfamily member 2) (MPP2), mRNA        |
| NM_005373 | Homo sapiens myeloproliferative leukemia virus oncogene (MPL), mRNA                               |
| NM_005372 | Homo sapiens v-mos Moloney murine sarcoma viral oncogene homolog (MOS), mRNA                      |
| NM_005439 | Homo sapiens myeloid leukemia factor 2 (MLF2), mRNA   |
| NM_005369 | Homo sapiens MCF.2 cell line derived transforming sequence (MCF2), mRNA                           |
| NM_005368 | Homo sapiens myoglobin (MB), mRNA   |
| NM_005363 | Homo sapiens melanoma antigen, family A, 6 (MAGEA6), mRNA   |
| NM_005362 | Homo sapiens melanoma antigen, family A, 3 (MAGEA3), mRNA   |
| NM_005361 | Homo sapiens melanoma antigen, family A, 2 (MAGEA2), mRNA   |
| NM_005475 | Homo sapiens lymphocyte adaptor protein (LNK), mRNA   |
| NM_005357 | Homo sapiens lipase, hormone-sensitive (LIPE), mRNA   |
| NM_005356 | Homo sapiens lymphocyte-specific protein tyrosine kinase (LCK), mRNA                              |
| NM_005472 | Homo sapiens potassium voltage-gated channel, Isk-related family, member 3 (KCNE3), mRNA          |
| NM_005495 | Homo sapiens solute carrier family 17 (sodium phosphate), member 4 (SLC17A4), mRNA                |
| NM_005456 | Homo sapiens mitogen-activated protein kinase 8 interacting protein 1 (MAPK8IP1), mRNA            |
| NM_005343 | Homo sapiens v-Ha-ras Harvey rat sarcoma viral oncogene homolog (HRAS), mRNA                      |
| NM_005342 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4), mRNA                  |
| NM_005341 | Homo sapiens GLI-Kruppel family member HKR3 (HKR3), mRNA  |
| NM_005337 | Homo sapiens hematopoietic protein 1 (HEM1), mRNA   |
| NM_005477 | Homo sapiens hyperpolarization activated cyclic nucleotide-gated potassium channel 4 (HCN4), mRNA |
| NM_005335 | Homo sapiens hematopoietic cell-specific Lyn substrate 1 (HCLS1), mRNA                            |
| NM_005334 | Homo sapiens host cell factor C1 (VP16-accessory protein) (HCFC1), mRNA                           |
| NM_005333 | Homo sapiens holocytochrome c synthase (cytochrome c heme-lyase) (HCCS), mRNA                     |
| NM_005328 | Homo sapiens hyaluronan synthase 2 (HAS2), mRNA   |
| NM_005327 | Homo sapiens L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain (HADHSC), mRNA                 |
| NM_005324 | Homo sapiens H3 histone, family 3B (H3.3B) (H3F3B), mRNA  |
| NM_005321 | Homo sapiens H1 histone family, member 4 (H1F4), mRNA   |
| NM_005320 | Homo sapiens H1 histone family, member 3 (H1F3), mRNA   |
| NM_005319 | Homo sapiens H1 histone family, member 2 (H1F2), mRNA   |
| NM_005325 | Homo sapiens H1 histone family, member 1 (H1F1), mRNA   |
| NM_005318 | Homo sapiens H1 histone family, member 0 (H1F0), mRNA   |
| NM_005459 | Homo sapiens guanylate cyclase activator 1C (GUCA1C), mRNA  |
| NM_005316 | Homo sapiens general transcription factor IIH, polypeptide 1 (62kD subunit) (GTF2H1), mRNA        |
| NM_005315 | Homo sapiens goosecoid-like (GSCL), mRNA  |
| NM_005314 | Homo sapiens gastrin-releasing peptide receptor (GRPR), mRNA                                      |
| NM_005313 | Homo sapiens glucose regulated protein, 58kD (GRP58), mRNA  |
| NM_005312 | Homo sapiens guanine nucleotide-releasing factor 2 (specific for crk proto-oncogene) (GRF2), mRNA |
| NM_005311 | Homo sapiens growth factor receptor-bound protein 10 (GRB10), mRNA                                |
| NM_005309 | Homo sapiens glutamic-pyruvate transaminase (alanine aminotransferase) (GPT), mRNA                |



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| NM_005308 | Homo sapiens G protein-coupled receptor kinase 5 (GPRK5), mRNA   |
| NM_005286 | Homo sapiens G protein-coupled receptor 8 (GPR8), mRNA   |
| NM_005285 | Homo sapiens G protein-coupled receptor 7 (GPR7), mRNA   |
| NM_005284 | Homo sapiens G protein-coupled receptor 6 (GPR6), mRNA   |
| NM_005458 | Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA   |
| NM_005282 | Homo sapiens G protein-coupled receptor 4 (GPR4), mRNA   |
| NM_005306 | Homo sapiens G protein-coupled receptor 43 (GPR43), mRNA   |
| NM_005305 | Homo sapiens G protein-coupled receptor 42 (GPR42), mRNA   |
| NM_005304 | Homo sapiens G protein-coupled receptor 41 (GPR41), mRNA   |
| NM_005303 | Homo sapiens G protein-coupled receptor 40 (GPR40), mRNA   |
| NM_005281 | Homo sapiens G protein-coupled receptor 3 (GPR3), mRNA   |
| NM_005302 | Homo sapiens G protein-coupled receptor 37 (endothelin receptor type B-like) (GPR37), mRNA                           |
| NM_005301 | Homo sapiens G protein-coupled receptor 35 (GPR35), mRNA   |
| NM_005300 | Homo sapiens G protein-coupled receptor 34 (GPR34), mRNA   |
| NM_005299 | Homo sapiens G protein-coupled receptor 31 (GPR31), mRNA   |
| NM_005298 | Homo sapiens G protein-coupled receptor 25 (GPR25), mRNA   |
| NM_005297 | Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA   |
| NM_005296 | Homo sapiens G protein-coupled receptor 23 (GPR23), mRNA   |
| NM_005295 | Homo sapiens G protein-coupled receptor 22 (GPR22), mRNA   |
| NM_005294 | Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA   |
| NM_005293 | Homo sapiens G protein-coupled receptor 20 (GPR20), mRNA   |
| NM_005279 | Homo sapiens G protein-coupled receptor 1 (GPR1), mRNA   |
| NM_005291 | Homo sapiens G protein-coupled receptor 17 (GPR17), mRNA   |
| NM_005290 | Homo sapiens G protein-coupled receptor 15 (GPR15), mRNA   |
| NM_005288 | Homo sapiens G protein-coupled receptor 12 (GPR12), mRNA   |
| NM_005276 | Homo sapiens glycerol-3-phosphate dehydrogenase 1 (soluble) (GPD1), mRNA   |
| NM_005275 | Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA  |
| NM_005274 | Homo sapiens guanine nucleotide binding protein (G protein), gamma 5 (GNG5), mRNA                                    |
| NM_005273 | Homo sapiens guanine nucleotide binding protein (G protein), beta polypeptide 2 (GNB2), mRNA                         |
| NM_005271 | Homo sapiens glutamate dehydrogenase 1 (GLUD1), mRNA   |
| NM_005269 | Homo sapiens glioma-associated oncogene homolog (zinc finger protein) (GLI), mRNA                                    |
| NM_005264 | Homo sapiens GDNF family receptor alpha 1 (GFRA1), mRNA  |
| NM_005263 | Homo sapiens growth factor independent 1 (GFI1), mRNA  |
| NM_005256 | Homo sapiens growth arrest-specific 2 (GAS2), mRNA   |
| NM_005255 | Homo sapiens cyclin G associated kinase (GAK), mRNA  |
| NM_005253 | Homo sapiens FOS-like antigen 2 (FOSL2), mRNA  |
| NM_005249 | Homo sapiens forkhead box G1B (FOXG1B), mRNA   |
| NM_005251 | Homo sapiens forkhead box C2 (MFH-1, mesenchyme forkhead 1) (FOXC2), mRNA  |
| NM_005248 | Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR), mRNA                               |
| NM_005246 | Homo sapiens fer (fps/fes related) tyrosine kinase (phosphoprotein NCP94) (FER), mRNA                                |
| NM_005234 | Homo sapiens nuclear receptor subfamily 2, group F, member 6 (NR2F6), mRNA   |
| NM_005233 | Homo sapiens EphA3 (EPHA3), mRNA   |
| NM_005231 | Homo sapiens ems1 sequence (mammary tumor and squamous cell carcinoma-associated (p80/85 src substrate) (EMS1), mRNA |

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| NM_005227 | Homo sapiens ephrin-A4 (EFNA4), mRNA  |
| NM_005223 | Homo sapiens deoxyribonuclease I (DNASE1), mRNA   |
| NM_005222 | Homo sapiens distal-less homeo box 6 (DLX6), mRNA   |
| NM_005220 | Homo sapiens distal-less homeo box 3 (DLX3), mRNA   |
| NM_005216 | Homo sapiens dolichyl-diphosphooligosaccharide-protein glycosyltransferase (DDOST), mRNA  |
| NM_005215 | Homo sapiens deleted in colorectal carcinoma (DCC), mRNA  |
| NM_005436 | Homo sapiens DNA segment, single copy, probe pH4 (transforming sequence, thyroid-1, (D10S170), mRNA   |
| NM_005214 | Homo sapiens cytotoxic T-lymphocyte-associated protein 4 (CTLA4), mRNA  |
| NM_005213 | Homo sapiens cystatin A (stefin A) (CSTA), mRNA   |
| NM_005492 | Homo sapiens cystatin 8 (cystatin-related epididymal specific) (CST8), mRNA   |
| NM_005212 | Homo sapiens casein, kappa (CSN10), mRNA  |
| NM_005211 | Homo sapiens colony stimulating factor 1 receptor, formerly McDonough feline sarcoma viral (v-fms) oncogene homolog (CSF1R), mRNA                 |
| NM_005204 | Homo sapiens mitogen-activated protein kinase kinase kinase 8 (MAP3K8), mRNA  |
| NM_005200 | Homo sapiens cell matrix adhesion regulator (CMAR), mRNA  |
| NM_005195 | Homo sapiens CCAAT/enhancer binding protein (C/EBP), delta (CEBPD), mRNA  |
| NM_005194 | Homo sapiens CCAAT/enhancer binding protein (C/EBP), beta (CEBPB), mRNA   |
| NM_005193 | Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA  |
| NM_005191 | Homo sapiens CD80 antigen (CD28 antigen ligand 1, B7-1 antigen) (CD80), mRNA  |
| NM_005188 | Homo sapiens Cas-Br-M (murine) ecotropic retroviral transforming sequence (CBL), mRNA   |
| NM_005185 | Homo sapiens calmodulin-like 3 (CALML3), mRNA   |
| NM_005184 | Homo sapiens calmodulin 3 (phosphorylase kinase, delta) (CALM3), mRNA   |
| NM_005483 | Homo sapiens chromatin assembly factor 1, subunit A (p150) (CHAF1A), mRNA   |
| NM_005441 | Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA  |
| NM_005183 | Homo sapiens calcium channel, voltage-dependent, alpha 1F subunit (CACNA1F), mRNA   |
| NM_005182 | Homo sapiens carbonic anhydrase VII (CA7), mRNA   |
| NM_005448 | Homo sapiens bone morphogenetic protein 15 (BMP15), mRNA  |
| NM_005178 | Homo sapiens B-cell CLL/lymphoma 3 (BCL3), mRNA   |
| NM_005177 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116kD) (ATP6N1A), mRNA |
| NM_005174 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, gamma polypeptide 1 (ATP5C1), mRNA                              |
| NM_005173 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, ubiquitous (ATP2A3), mRNA   |
| NM_005171 | Homo sapiens activating transcription factor 1 (ATF1), mRNA   |
| NM_005167 | Homo sapiens ras homolog gene family, member C (ARHC), mRNA   |
| NM_005166 | Homo sapiens amyloid beta (A4) precursor-like protein 1 (APLP1), mRNA   |
| NM_005165 | Homo sapiens aldolase C, fructose-bisphosphate (ALDOC), mRNA  |
| NM_005163 | Homo sapiens v-akt murine thymoma viral oncogene homolog 1 (AKT1), mRNA   |
| NM_005161 | Homo sapiens angiotensin receptor-like 1 (AGTRL1), mRNA   |
| NM_005095 | Homo sapiens zinc finger protein 262 (ZNF262), mRNA   |
| NM_005096 | Homo sapiens zinc finger protein 261 (ZNF261), mRNA   |
| NM_005081 | Homo sapiens zinc finger protein 142 (clone pHZ-49) (ZNF142), mRNA  |

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| NM_005121 | Homo sapiens thyroid hormone receptor-associated protein, 240 kDa subunit (TRAP240), mRNA                         |
| NM_005079 | Homo sapiens tumor protein D52 (TPD52), mRNA  |
| NM_005091 | Homo sapiens peptidoglycan recognition protein (PGLYRP), mRNA   |
| NM_005092 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 18 (TNFSF18), mRNA                                |
| NM_005118 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 15 (TNFSF15), mRNA                                |
| NM_005147 | Homo sapiens tumorous imaginal discs (Drosophila) homolog (TID1), mRNA  |
| NM_005076 | Homo sapiens contactin 2 (axonal) (CNTN2), mRNA   |
| NM_005116 | Homo sapiens solute carrier family 23 (nucleobase transporters), member 1 (SLC23A1), mRNA                         |
| NM_005070 | Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA                                    |
| NM_005074 | Homo sapiens solute carrier family 17 (sodium phosphate), member 1 (SLC17A1), mRNA                                |
| NM_005073 | Homo sapiens solute carrier family 15 (oligopeptide transporter), member 1 (SLC15A1), mRNA                        |
| NM_005072 | Homo sapiens solute carrier family 12 (potassium/chloride transporters), member 4 (SLC12A4), mRNA                 |
| NM_005063 | Homo sapiens stearyl-CoA desaturase (delta-9-desaturase) (SCD), mRNA  |
| NM_005060 | Homo sapiens RAR-related orphan receptor C (RORC), mRNA   |
| NM_005059 | Homo sapiens relaxin 2 (H2) (RLN2), mRNA  |
| NM_005045 | Homo sapiens reelin (RELN), mRNA  |
| NM_005058 | Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1), mRNA                          |
| NM_005052 | Homo sapiens ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3) (RAC3), mRNA |
| NM_005051 | Homo sapiens glutamyl-tRNA synthetase (QARS), mRNA  |
| NM_005048 | Homo sapiens parathyroid hormone receptor 2 (PTH2R), mRNA   |
| NM_005044 | Homo sapiens protein kinase, X-linked (PRKX), mRNA  |
| NM_005043 | Homo sapiens mitogen-activated protein kinase kinase 7 (MAP2K7), mRNA   |
| NM_005042 | Homo sapiens proline-rich protein HaeIII subfamily 2 (PRH2), mRNA   |
| NM_005041 | Homo sapiens perforin 1 (preforming protein) (PRF1), mRNA   |
| NM_005040 | Homo sapiens prolylcarboxypeptidase (angiotensinase C) (PRCP), mRNA   |
| NM_005039 | Homo sapiens proline-rich protein BstNI subfamily 1 (PRB1), mRNA  |
| NM_005038 | Homo sapiens peptidylprolyl isomerase D (cyclophilin D) (PPID), mRNA  |
| NM_005029 | Homo sapiens paired-like homeodomain transcription factor 3 (PITX3), mRNA   |
| NM_005027 | Homo sapiens phosphoinositide-3-kinase, regulatory subunit, polypeptide 2 (p85 beta) (PIK3R2), mRNA               |
| NM_005026 | Homo sapiens phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD), mRNA                               |
| NM_005021 | Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 3 (ENPP3), mRNA                                     |
| NM_005019 | Homo sapiens phosphodiesterase 1A, calmodulin-dependent (PDE1A), mRNA   |
| NM_005018 | Homo sapiens programmed cell death 1 (PDCD1), mRNA  |
| NM_005015 | Homo sapiens oxidase (cytochrome c) assembly 1-like (OXA1L), mRNA   |
| NM_005085 | Homo sapiens nucleoporin 214kD (CAIN) (NUP214), mRNA  |
| NM_005124 | Homo sapiens nucleoporin 153kD (NUP153), mRNA   |
| NM_005013 | Homo sapiens nucleobindin 2 (NUCB2), mRNA   |
| NM_005012 | Homo sapiens receptor tyrosine kinase-like orphan receptor 1 (ROR1), mRNA   |
| NM_005011 | Homo sapiens nuclear respiratory factor 1 (NRF1), mRNA  |

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| NM_005010 | Homo sapiens neuronal cell adhesion molecule (NRCAM), mRNA   |
| NM_005009 | Homo sapiens non-metastatic cells 4, protein expressed in (NME4), mRNA   |
| NM_005007 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1 (NFKBIL1), mRNA |
| NM_005004 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (19kD, ASH1) (NDUFB8), mRNA                    |
| NM_005001 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (14.5kD, B14.5a) (NDUFA7), mRNA               |
| NM_004988 | Homo sapiens melanoma antigen, family A, 1 (directs expression of antigen MZ2-E) (MAGEA1), mRNA                  |
| NM_005097 | Homo sapiens leucine-rich, glioma inactivated 1 (LG11), mRNA   |
| NM_004984 | Homo sapiens kinesin family member 5A (KIF5A), mRNA  |
| NM_004983 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 9 (KCNJ9), mRNA                          |
| NM_004982 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 8 (KCNJ8), mRNA                          |
| NM_000890 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 5 (KCNJ5), mRNA                          |
| NM_004981 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 4 (KCNJ4), mRNA                          |
| NM_005136 | Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2), mRNA                         |
| NM_004980 | Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 3 (KCND3), mRNA                     |
| NM_004979 | Homo sapiens potassium voltage-gated channel, Shal-related family, member 1 (KCND1), mRNA                        |
| NM_004978 | Homo sapiens potassium voltage-gated channel, Shaw-related subfamily, member 4 (KCNC4), mRNA                     |
| NM_004977 | Homo sapiens potassium voltage-gated channel, Shaw-related subfamily, member 3 (KCNC3), mRNA                     |
| NM_004976 | Homo sapiens potassium voltage-gated channel, Shaw-related subfamily, member 1 (KCNC1), mRNA                     |
| NM_004975 | Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1), mRNA                     |
| NM_004969 | Homo sapiens insulin-degrading enzyme (IDE), mRNA  |
| NM_005143 | Homo sapiens haptoglobin (HP), mRNA  |
| NM_004965 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 14 (HMG14), mRNA                               |
| NM_005130 | Homo sapiens heparin-binding growth factor binding protein (HBP17), mRNA   |
| NM_004963 | Homo sapiens guanylate cyclase 2C (heat stable enterotoxin receptor) (GUCY2C), mRNA                              |
| NM_005100 | Homo sapiens A kinase (PRKA) anchor protein (gravin) 12 (AKAP12), mRNA   |
| NM_005113 | Homo sapiens golgi autoantigen, golgin subfamily a, 5 (GOLGA5), mRNA   |
| NM_005145 | Homo sapiens guanine nucleotide binding protein (G protein), gamma 7 (GNG7), mRNA                                |
| NM_005142 | Homo sapiens gastric intrinsic factor (vitamin B synthesis) (GIF), mRNA  |
| NM_005110 | Homo sapiens glutamine-fructose-6-phosphate transaminase 2 (GFPT2), mRNA   |
| NM_004960 | Homo sapiens fusion, derived from t(12;16) malignant liposarcoma (FUS), mRNA                                     |
| NM_004959 | Homo sapiens nuclear receptor subfamily 5, group A, member 1 (NR5A1), mRNA                                       |
| NM_004957 | Homo sapiens folylpolyglutamate synthase (FPGS), mRNA  |

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| NM_004956 | Homo sapiens ets variant gene 1 (ETV1), mRNA   |
| NM_004955 | Homo sapiens solute carrier family 29 (nucleoside transporters), member 1 (SLC29A1), mRNA  |
| NM_005107 | Homo sapiens endonuclease G-like 1 (ENDOGL1), mRNA   |
| NM_004953 | Homo sapiens eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1), mRNA  |
| NM_004952 | Homo sapiens ephrin-A3 (EFNA3), mRNA   |
| NM_004944 | Homo sapiens deoxyribonuclease I-like 3 (DNASE1L3), mRNA   |
| NM_004938 | Homo sapiens death-associated protein kinase 1 (DAPK1), mRNA   |
| NM_005127 | Homo sapiens C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 2 (activation-induced) (CLECSF2), mRNA |
| NM_004935 | Homo sapiens cyclin-dependent kinase 5 (CDK5), mRNA  |
| NM_004931 | Homo sapiens CD8 antigen, beta polypeptide 1 (p37) (CD8B1), mRNA   |
| NM_005125 | Homo sapiens copper chaperone for superoxide dismutase (CCS), mRNA   |
| NM_005093 | Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 2 (CBFA2T2), mRNA   |
| NM_004930 | Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA  |
| NM_005139 | Homo sapiens annexin A3 (ANXA3), mRNA  |
| NM_000664 | Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA   |
| NM_002108 | Homo sapiens histidine ammonia-lyase (HAL), mRNA   |
| NM_001718 | Homo sapiens bone morphogenetic protein 6 (BMP6), mRNA   |
| NM_001154 | Homo sapiens annexin A5 (ANXA5), mRNA  |
| NM_001153 | Homo sapiens annexin A4 (ANXA4), mRNA  |
| NM_004817 | Homo sapiens tight junction protein 2 (zona occludens 2) (TJP2), mRNA  |
| NM_004736 | Homo sapiens xenotropic and polytropic retrovirus receptor (XPR1), mRNA  |
| NM_004628 | Homo sapiens xeroderma pigmentosum, complementation group C (XPC), mRNA  |
| NM_004627 | Homo sapiens tryptophan rich basic protein (WRB), mRNA   |
| NM_004183 | Homo sapiens vitelliform macular dystrophy (Best disease, bestrophin) (VMD2), mRNA   |
| NM_004664 | Homo sapiens Vertebrate LIN7 homolog 1, Tax interaction protein 33 (VELI1), mRNA   |
| NM_004679 | Homo sapiens variable charge, Y chromosome (VCY), mRNA   |
| NM_004182 | Homo sapiens ubiquitously-expressed transcript (UXT), mRNA   |
| NM_004651 | Homo sapiens ubiquitin specific protease 11 (USP11), mRNA  |
| NM_004181 | Homo sapiens ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesterase) (UCHL1), mRNA   |
| NM_004223 | Homo sapiens ubiquitin-conjugating enzyme E2L 6 (UBE2L6), mRNA   |
| NM_004623 | Homo sapiens tetratricopeptide repeat domain 4 (TTC4), mRNA  |
| NM_004622 | Homo sapiens translin (TSN), mRNA  |
| NM_004236 | Homo sapiens thyroid receptor interacting protein 15 (TRIP15), mRNA  |
| NM_004909 | Homo sapiens taxol resistance associated gene 3 (TRAG3), mRNA  |
| NM_004295 | Homo sapiens TNF receptor-associated factor 4 (TRAF4), mRNA  |
| NM_004179 | Homo sapiens tryptophan hydroxylase (tryptophan 5-monooxygenase) (TPH), mRNA   |
| NM_004195 | Homo sapiens tumor necrosis factor receptor superfamily, member 18 (TNFRSF18), mRNA  |
| NM_004202 | Homo sapiens thymosin, beta 4, Y chromosome (TMSB4Y), mRNA   |
| NM_004616 | Homo sapiens transmembrane 4 superfamily member 3 (TM4SF3), mRNA   |
| NM_004615 | Homo sapiens transmembrane 4 superfamily member 2 (TM4SF2), mRNA   |
| NM_004865 | Homo sapiens TBP-like 1 (TBPL1), mRNA  |

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| NM_004613 | Homo sapiens transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM2), mRNA  |
| NM_004612 | Homo sapiens transforming growth factor, beta receptor I (activin A receptor type II-like kinase, 53kD) (TGFBRI), mRNA                                 |
| NM_004708 | Homo sapiens programmed cell death 5 (PDCD5), mRNA   |
| NM_004918 | Homo sapiens T-cell leukemia/lymphoma 1B (TCL1B), mRNA   |
| NM_004609 | Homo sapiens transcription factor 15 (basic helix-loop-helix) (TCF15), mRNA  |
| NM_004780 | Homo sapiens transcription elongation factor A (SII)-like 1 (TCEAL1), mRNA   |
| NM_004783 | Homo sapiens thousand and one amino acid protein kinase (TAO1), mRNA   |
| NM_004606 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, A, 250kD (TAF2A), mRNA   |
| NM_004710 | Homo sapiens synaptogyrin 2 (SYNGR2), mRNA   |
| NM_004711 | Homo sapiens synaptogyrin 1 (SYNGR1), mRNA   |
| NM_004605 | Homo sapiens sulfotransferase family, cytosolic, 2B, member 1 (SULT2B1), mRNA  |
| NM_004853 | Homo sapiens syntaxin 8 (STX8), mRNA   |
| NM_004603 | Homo sapiens syntaxin 1A (brain) (STX1A), mRNA   |
| NM_004217 | Homo sapiens serine/threonine kinase 12 (STK12), mRNA  |
| NM_004599 | Homo sapiens sterol regulatory element binding transcription factor 2 (SREBF2), mRNA   |
| NM_004176 | Homo sapiens sterol regulatory element binding transcription factor 1 (SREBF1), mRNA   |
| NM_000582 | Homo sapiens secreted phosphoprotein 1 (osteopontin, bone sialoprotein I, early T-lymphocyte activation 1) (SPPI), mRNA                                |
| NM_004189 | Homo sapiens SRY (sex determining region Y)-box 14 (SOX14), mRNA   |
| NM_004596 | Homo sapiens small nuclear ribonucleoprotein polypeptide A (SNRPA), mRNA   |
| NM_004782 | Homo sapiens synaptosomal-associated protein, 29kD (SNAP29), mRNA  |
| NM_004595 | Homo sapiens spermine synthase (SMS), mRNA   |
| NM_004594 | Homo sapiens solute carrier family 9 (sodium/hydrogen exchanger), isoform 5 (SLC9A5), mRNA   |
| NM_004173 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 4 (SLC7A4), mRNA   |
| NM_004211 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, glycine), member 5 (SLC6A5), mRNA  |
| NM_004858 | Homo sapiens solute carrier family 4, sodium bicarbonate cotransporter, member 8 (SLC4A8), mRNA  |
| NM_004727 | Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 1 (SLC24A1), mRNA   |
| NM_004172 | Homo sapiens solute carrier family 1 (glial high affinity glutamate transporter), member 3 (SLC1A3), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004171 | Homo sapiens solute carrier family 1 (glial high affinity glutamate transporter), member 2 (SLC1A2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004731 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 7 (SLC16A7), mRNA   |
| NM_004695 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 5 (SLC16A5), mRNA   |
| NM_004207 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 3 (SLC16A3), mRNA   |
| NM_004870 | Homo sapiens mannose-P-dolichol utilization defect 1 (MPDU1), mRNA   |
| NM_004768 | Homo sapiens splicing factor, arginine/serine-rich 11 (SFRS11), mRNA   |
| NM_004636 | Homo sapiens sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B (SEMA3B), mRNA                                     |

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| NM_004753 | Homo sapiens short-chain dehydrogenase/reductase 1 (SDR1), mRNA  |
| NM_004168 | Homo sapiens succinate dehydrogenase complex, subunit A, flavoprotein (Fp) (SDHA), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004713 | Homo sapiens serologically defined colon cancer antigen 1 (SDCCAG1), mRNA  |
| NM_004591 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 20 (SCYA20), mRNA  |
| NM_004590 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 16 (SCYA16), mRNA  |
| NM_004588 | Homo sapiens sodium channel, voltage-gated, type II, beta polypeptide (SCN2B), mRNA  |
| NM_004165 | Homo sapiens Ras-related associated with diabetes (RRAD), mRNA   |
| NM_004755 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 5 (RPS6KA5), mRNA  |
| NM_004586 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 3 (RPS6KA3), mRNA  |
| NM_004790 | Homo sapiens solute carrier family 22 (organic anion transporter), member 6 (SLC22A6), mRNA  |
| NM_004259 | Homo sapiens RecQ protein-like 5 (RECQL5), mRNA  |
| NM_004260 | Homo sapiens RecQ protein-like 4 (RECQL4), mRNA  |
| NM_004583 | Homo sapiens RAB5C, member RAS oncogene family (RAB5C), mRNA   |
| NM_004582 | Homo sapiens Rab geranylgeranyltransferase, beta subunit (RABGGTB), mRNA   |
| NM_004581 | Homo sapiens Rab geranylgeranyltransferase, alpha subunit (RABGGTA), mRNA  |
| NM_004251 | Homo sapiens RAB9, member RAS oncogene family (RAB9), mRNA   |
| NM_004162 | Homo sapiens RAB5A, member RAS oncogene family (RAB5A), mRNA   |
| NM_004578 | Homo sapiens RAB4, member RAS oncogene family (RAB4), mRNA   |
| NM_004914 | Homo sapiens RAB36, member RAS oncogene family (RAB36), mRNA   |
| NM_004580 | Homo sapiens RAB27A, member RAS oncogene family (RAB27A), mRNA   |
| NM_004663 | Homo sapiens RAB11A, member RAS oncogene family (RAB11A), mRNA   |
| NM_004160 | Homo sapiens peptide YY (PYY), mRNA  |
| NM_004103 | Homo sapiens protein tyrosine kinase 2 beta (PTK2B), mRNA  |
| NM_004158 | Homo sapiens persephin (PSPN), mRNA  |
| NM_004577 | Homo sapiens phosphoserine phosphatase (PSPH), mRNA  |
| NM_004159 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional protease 7) (PSMB8), mRNA                  |
| NM_004917 | Homo sapiens kallikrein 4 (prostase, enamel matrix, prostate) (KLK4), mRNA   |
| NM_004157 | Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, alpha (PRKAR2A), mRNA  |
| NM_004758 | Homo sapiens peripheral benzodiazepine receptor-associated protein 1 (PRAX-1), mRNA  |
| NM_004576 | Homo sapiens protein phosphatase 2 (formerly 2A), regulatory subunit B (PR52), beta isoform (PPP2R2B), mRNA                          |
| NM_004156 | Homo sapiens protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform (PPP2CB), mRNA                                     |
| NM_000942 | Homo sapiens peptidylprolyl isomerase B (cyclophilin B) (PPIB), mRNA   |
| NM_004575 | Homo sapiens POU domain, class 4, transcription factor 2 (POU4F2), mRNA  |
| NM_004573 | Homo sapiens phospholipase C, beta 2 (PLCB2), mRNA   |
| NM_004572 | Homo sapiens plakophilin 2 (PKP2), mRNA  |
| NM_004571 | Homo sapiens PBX/knotted 1 homeobox 1 (PKNOX1), mRNA   |
| NM_004203 | Homo sapiens membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase (PKMYT1), mRNA                              |
| NM_004910 | Homo sapiens phosphatidylinositol transfer protein, membrane-associated  |

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|           | (PITPNM), mRNA   |
| NM_004278 | Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA   |
| NM_004569 | Homo sapiens phosphatidylinositol glycan, class H (PIGH), mRNA   |
| NM_004855 | Homo sapiens phosphatidylinositol glycan, class B (PIGB), mRNA   |
| NM_004862 | Homo sapiens LPS-induced TNF-alpha factor (PIG7), mRNA   |
| NM_004878 | Homo sapiens prostaglandin E synthase (PTGES), mRNA  |
| NM_004567 | Homo sapiens 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4 (PFKFB4), mRNA  |
| NM_004566 | Homo sapiens 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 (PFKFB3), mRNA  |
| NM_004836 | Homo sapiens eukaryotic translation initiation factor 2-alpha kinase 3 (EIF2AK3), mRNA                                     |
| NM_004716 | Homo sapiens proprotein convertase subtilisin/kexin type 7 (PCSK7), mRNA   |
| NM_000437 | Homo sapiens platelet-activating factor acetylhydrolase 2 (40kD) (PAFAH2), mRNA  |
| NM_004199 | Homo sapiens procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide II (P4HA2), mRNA |
| NM_004154 | Homo sapiens pyrimidinergic receptor P2Y, G-protein coupled, 6 (P2RY6), mRNA   |
| NM_004280 | Homo sapiens eukaryotic translation elongation factor 1 epsilon 1 (EEF1E1), mRNA   |
| NM_004741 | Homo sapiens nucleolar phosphoprotein p130 (P130), mRNA  |
| NM_004802 | Homo sapiens otoferlin (OTOF), mRNA  |
| NM_004852 | Homo sapiens one cut domain, family member 2 (ONECUT2), mRNA   |
| NM_004254 | Homo sapiens solute carrier family 22 (organic anion transporter), member 8 (SLC22A8), mRNA                                |
| NM_004298 | Homo sapiens nucleoporin 155kD (NUP155), mRNA  |
| NM_004560 | Homo sapiens receptor tyrosine kinase-like orphan receptor 2 (ROR2), mRNA  |
| NM_004822 | Homo sapiens netrin 1 (NTN1), mRNA   |
| NM_004796 | Homo sapiens neurexin 3 (NRXN3), mRNA  |
| NM_004558 | Homo sapiens neurturin (NRTN), mRNA  |
| NM_004688 | Homo sapiens N-myc (and STAT) interactor (NMI), mRNA   |
| NM_004148 | Homo sapiens ninjurin 1 (NINJ1), mRNA  |
| NM_004552 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (15kD) (NADH-coenzyme Q reductase) (NDUFS5), mRNA              |
| NM_004551 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 3 (30kD) (NADH-coenzyme Q reductase) (NDUFS3), mRNA              |
| NM_004550 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 2 (49kD) (NADH-coenzyme Q reductase) (NDUFS2), mRNA              |
| NM_004540 | Homo sapiens neural cell adhesion molecule 2 (NCAM2), mRNA   |
| NM_004644 | Homo sapiens adaptor-related protein complex 3, beta 2 subunit (AP3B2), mRNA   |
| NM_004538 | Homo sapiens nucleosome assembly protein 1-like 3 (NAP1L3), mRNA   |
| NM_004145 | Homo sapiens myosin IXB (MYO9B), mRNA  |
| NM_004294 | Homo sapiens mitochondrial translational release factor 1 (MTRF1), mRNA  |
| NM_004923 | Homo sapiens metallothionein-like 5, testis-specific (tesmin) (MTL5), mRNA   |
| NM_004143 | Homo sapiens Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 1 (CITED1), mRNA              |
| NM_004279 | Homo sapiens peptidase (mitochondrial processing) beta (PMPCB), mRNA   |
| NM_004531 | Homo sapiens molybdenum cofactor synthesis 2 (MOCS2), mRNA   |
| NM_004244 | Homo sapiens CD163 antigen (CD163), mRNA   |
| NM_004528 | Homo sapiens microsomal glutathione S-transferase 3 (MGST3), mRNA  |



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| NM_004225 | Homo sapiens MFH-amplified sequences with leucine-rich tandem repeats 1 (MASL1), mRNA                         |
| NM_002372 | Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA  |
| NM_004721 | Homo sapiens mitogen-activated protein kinase kinase kinase 13 (MAP3K13), mRNA                                |
| NM_002332 | Homo sapiens low density lipoprotein-related protein 1 (alpha-2-macroglobulin receptor) (LRP1), mRNA          |
| NM_004793 | Homo sapiens protease, serine, 15 (PRSS15), mRNA  |
| NM_004789 | Homo sapiens LIM homeobox protein 2 (LHX2), mRNA  |
| NM_004863 | Homo sapiens serine palmitoyltransferase, long chain base subunit 2 (SPTLC2), mRNA                            |
| NM_004737 | Homo sapiens like-glycosyltransferase (LARGE), mRNA   |
| NM_004795 | Homo sapiens klotho (KL), mRNA  |
| NM_004521 | Homo sapiens kinesin family member 5B (KIF5B), mRNA   |
| NM_004520 | Homo sapiens kinesin heavy chain member 2 (KIF2), mRNA  |
| NM_004920 | Homo sapiens apoptosis-associated tyrosine kinase (AATK), mRNA  |
| NM_004700 | Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 4 (KCNQ4), mRNA                      |
| NM_004519 | Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 3 (KCNQ3), mRNA                      |
| NM_004518 | Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 2 (KCNQ2), mRNA                      |
| NM_004137 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 1 (KCNMB1), mRNA |
| NM_004732 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, beta member 3 (KCNA3), mRNA           |
| NM_004693 | Homo sapiens cytokeratin type II (K6HF), mRNA   |
| NM_004791 | Homo sapiens integrin, beta-like 1 (with EGF-like repeat domains) (ITGBL1), mRNA                              |
| NM_004517 | Homo sapiens integrin-linked kinase (ILK), mRNA   |
| NM_004514 | Homo sapiens interleukin enhancer binding factor 1 (ILF1), mRNA   |
| NM_004633 | Homo sapiens interleukin 1 receptor, type II (IL1R2), mRNA  |
| NM_004513 | Homo sapiens interleukin 16 (lymphocyte chemoattractant factor) (IL16), mRNA                                  |
| NM_004512 | Homo sapiens interleukin 11 receptor, alpha (IL11RA), mRNA  |
| NM_004258 | Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA   |
| NM_004135 | Homo sapiens isocitrate dehydrogenase 3 (NAD+) gamma (IDH3G), mRNA  |
| NM_004134 | Homo sapiens heat shock 70kD protein 9B (mortalin-2) (HSPA9B), mRNA   |
| NM_004697 | Homo sapiens PRP4/STK/WD splicing factor (HPRP4P), mRNA   |
| NM_004698 | Homo sapiens U4/U6-associated RNA splicing factor (HPRP3P), mRNA  |
| NM_004503 | Homo sapiens homeo box C6 (HOXC6), mRNA   |
| NM_004502 | Homo sapiens homeo box B7 (HOXB7), mRNA   |
| NM_004497 | Homo sapiens hepatocyte nuclear factor 3, gamma (HNF3G), mRNA   |
| NM_004496 | Homo sapiens hepatocyte nuclear factor 3, alpha (HNF3A), mRNA   |
| NM_004712 | Homo sapiens hepatocyte growth factor-regulated tyrosine kinase substrate (HGS), mRNA                         |
| NM_004834 | Homo sapiens mitogen-activated protein kinase kinase kinase 4 (MAP4K4), mRNA                                  |
| NM_004494 | Homo sapiens hepatoma-derived growth factor (high-mobility group protein 1-like) (HDGF), mRNA                 |
| NM_004876 | Homo sapiens zinc finger protein 254 (ZNF254), mRNA   |
| NM_004493 | Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase, type II (HADH2), mRNA                                      |

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| NM_004904 | Homo sapiens cAMP response element-binding protein CRE-BPa (H GS165L15.1), mRNA  |
| NM_004893 | Homo sapiens H2A histone family, member Y (H2AFY), mRNA  |
| NM_004130 | Homo sapiens glycogenin (GYG), mRNA  |
| NM_004286 | Homo sapiens GTP binding protein 1 (GTPBP1), mRNA  |
| NM_004128 | Homo sapiens general transcription factor IIF, polypeptide 2 (30kD subunit) (GTF2F2), mRNA                               |
| NM_004491 | Homo sapiens glucocorticoid receptor DNA binding factor 1 (GRLF1), mRNA  |
| NM_000826 | Homo sapiens glutamate receptor, ionotropic, AMPA 2 (GRIA2), mRNA  |
| NM_004490 | Homo sapiens growth factor receptor-bound protein 14 (GRB14), mRNA   |
| NM_004810 | Homo sapiens GRB2-related adaptor protein 2 (GRAP2), mRNA  |
| NM_004224 | Homo sapiens G protein-coupled receptor 50 (GPR50), mRNA   |
| NM_004871 | Homo sapiens golgi SNAP receptor complex member 1 (GOSR1), mRNA  |
| NM_004487 | Homo sapiens golgi autoantigen, golgin subfamily b, macrogolgin (with transmembrane signal), 1 (GOLGB1), mRNA            |
| NM_004126 | Homo sapiens guanine nucleotide binding protein 11 (GNG11), mRNA   |
| NM_004297 | Homo sapiens guanine nucleotide binding protein (G protein), alpha 14 (GNA14), mRNA                                      |
| NM_004246 | Homo sapiens glucagon-like peptide 2 receptor (GLP2R), mRNA  |
| NM_004123 | Homo sapiens gastric inhibitory polypeptide (GIP), mRNA  |
| NM_004121 | Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA  |
| NM_004837 | Homo sapiens geranylgeranyl diphosphate synthase 1 (GGPS1), mRNA   |
| NM_004188 | Homo sapiens growth factor independent 1B (potential regulator of CDKN1A, translocated in CML) (GFI1B), mRNA             |
| NM_004293 | Homo sapiens guanine deaminase (GDA), mRNA   |
| NM_004751 | Homo sapiens glucosaminyl (N-acetyl) transferase 3, mucin type (GCNT3), mRNA   |
| NM_004193 | Homo sapiens golgi-specific brefeldin A resistance factor 1 (GBF1), mRNA   |
| NM_002030 | Homo sapiens formyl peptide receptor-like 2 (FPRL2), mRNA  |
| NM_004476 | Homo sapiens folate hydrolase (prostate-specific membrane antigen) 1 (FOLH1), mRNA                                       |
| NM_004119 | Homo sapiens fms-related tyrosine kinase 3 (FLT3), mRNA  |
| NM_004475 | Homo sapiens flotillin 2 (FLOT2), mRNA   |
| NM_004472 | Homo sapiens forkhead box D1 (FOXD1), mRNA   |
| NM_004471 | Homo sapiens forkhead box G1A (FOXG1A), mRNA   |
| NM_004474 | Homo sapiens forkhead box D2 (FOXD2), mRNA   |
| NM_004469 | Homo sapiens c-fos induced growth factor (vascular endothelial growth factor D) (FIGF), mRNA                             |
| NM_004468 | Homo sapiens four and a half LIM domains 3 (FHL3), mRNA  |
| NM_004462 | Homo sapiens farnesyl-diphosphate farnesyltransferase 1 (FDFT1), mRNA  |
| NM_004107 | Homo sapiens Fc fragment of IgG, receptor, transporter, alpha (FCGRT), mRNA  |
| NM_004104 | Homo sapiens fatty acid synthase (FASN), mRNA  |
| NM_004461 | Homo sapiens phenylalanine-tRNA synthetase-like (FARSL), mRNA  |
| NM_004101 | Homo sapiens coagulation factor II (thrombin) receptor-like 2 (F2RL2), mRNA  |
| NM_004235 | Homo sapiens Kruppel-like factor 4 (gut) (KLF4), mRNA  |
| NM_004455 | Homo sapiens exostoses (multiple)-like 1 (EXTL1), mRNA   |
| NM_004454 | Homo sapiens ets variant gene 5 (ets-related molecule) (ETV5), mRNA  |
| NM_004453 | Homo sapiens electron-transferring-flavoprotein dehydrogenase (ETFDH), nuclear gene encoding mitochondrial protein, mRNA |
| NM_004452 | Homo sapiens estrogen-related receptor beta (ESRRB), mRNA  |
| NM_004911 | Homo sapiens protein disulfide isomerase related protein (calcium-binding protein, intestinal-related) (ERP70), mRNA     |

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| NM_004447 | Homo sapiens epidermal growth factor receptor pathway substrate 8 (EPS8), mRNA                        |
| NM_004446 | Homo sapiens glutamyl-prolyl-tRNA synthetase (EPRS), mRNA   |
| NM_004431 | Homo sapiens EphA2 (EPHA2), mRNA  |
| NM_004099 | Homo sapiens erythrocyte membrane protein band 7.2 (stomatin) (EPB72), mRNA                           |
| NM_004437 | Homo sapiens erythrocyte membrane protein band 4.1 (elliptocytosis 1, RH-linked) (EPB41), mRNA        |
| NM_004435 | Homo sapiens endonuclease G (ENDOG), nuclear gene encoding mitochondrial protein, mRNA                |
| NM_004434 | Homo sapiens echinoderm microtubule-associated protein-like (EMAPL), mRNA                             |
| NM_004433 | Homo sapiens E74-like factor 3 (ets domain transcription factor, epithelial-specific) (ELF3), mRNA    |
| NM_004096 | Homo sapiens eukaryotic translation initiation factor 4E binding protein 2 (EIF4EBP2), mRNA           |
| NM_004095 | Homo sapiens eukaryotic translation initiation factor 4E binding protein 1 (EIF4EBP1), mRNA           |
| NM_004430 | Homo sapiens early growth response 3 (EGR3), mRNA   |
| NM_004093 | Homo sapiens ephrin-B2 (EFNB2), mRNA  |
| NM_004429 | Homo sapiens ephrin-B1 (EFNB1), mRNA  |
| NM_004428 | Homo sapiens ephrin-A1 (EFNA1), mRNA  |
| NM_004867 | Homo sapiens integral membrane protein 2A (ITM2A), mRNA   |
| NM_004415 | Homo sapiens desmoplakin (DPI, DPII) (DSP), mRNA  |
| NM_004760 | Homo sapiens serine/threonine kinase 17a (apoptosis-inducing) (STK17A), mRNA                          |
| NM_004413 | Homo sapiens dipeptidase 1 (renal) (DPEP1), mRNA  |
| NM_004088 | Homo sapiens deoxynucleotidyltransferase, terminal (DNTT), mRNA                                       |
| NM_004412 | Homo sapiens DNA (cytosine-5-)-methyltransferase 2 (DNMT2), mRNA                                      |
| NM_004411 | Homo sapiens dynein, cytoplasmic, intermediate polypeptide 1 (DNC11), mRNA                            |
| NM_004407 | Homo sapiens dentin matrix acidic phosphoprotein (DMP1), mRNA   |
| NM_004746 | Homo sapiens discs, large (Drosophila) homolog-associated protein 1 (DLGAP1), mRNA                    |
| NM_004747 | Homo sapiens discs, large (Drosophila) homolog 5 (DLG5), mRNA   |
| NM_004087 | Homo sapiens discs, large (Drosophila) homolog 1 (DLG1), mRNA   |
| NM_004900 | Homo sapiens phorbolin (similar to apolipoprotein B mRNA editing protein) (DJ742C19.2), mRNA          |
| NM_004404 | Homo sapiens neural precursor cell expressed, developmentally down-regulated 5 (NEDD5), mRNA          |
| NM_004402 | Homo sapiens DNA fragmentation factor, 40 kD, beta polypeptide (caspase-activated DNase) (DFFB), mRNA |
| NM_004401 | Homo sapiens DNA fragmentation factor, 45 kD, alpha polypeptide (DFFA), mRNA                          |
| NM_004083 | Homo sapiens DNA-damage-inducible transcript 3 (DDIT3), mRNA  |
| NM_004734 | Homo sapiens doublecortin and CaM kinase-like 1 (DCAMKL1), mRNA                                       |
| NM_004394 | Homo sapiens death-associated protein (DAP), mRNA   |
| NM_004393 | Homo sapiens dystroglycan 1 (dystrophin-associated glycoprotein 1) (DAG1), mRNA                       |
| NM_004229 | Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 2 (150kD) (CRSP2), mRNA    |
| NM_004079 | Homo sapiens cathepsin S (CTSS), mRNA   |
| NM_004390 | Homo sapiens cathepsin H (CTSH), mRNA   |

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| NM_004388 | Homo sapiens chitobiase, di-N-acetyl- (CTBS), mRNA   |
| NM_004387 | Homo sapiens cardiac-specific homeo box (CSX), mRNA  |
| NM_004861 | Homo sapiens cerebroside (3'-phosphoadenylylsulfate:galactosylceramide 3') sulfotransferase (CST), mRNA              |
| NM_004078 | Homo sapiens cysteine and glycine-rich protein 1 (CSRPI), mRNA   |
| NM_004386 | Homo sapiens chondroitin sulfate proteoglycan 3 (neurocan) (CSPG3), mRNA   |
| NM_004385 | Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2), mRNA   |
| NM_004384 | Homo sapiens casein kinase 1, gamma 3 (CSNK1G3), mRNA  |
| NM_004383 | Homo sapiens c-src tyrosine kinase (CSK), mRNA   |
| NM_004075 | Homo sapiens cryptochrome 1 (photolyase-like) (CRY1), mRNA   |
| NM_004778 | Homo sapiens G protein-coupled receptor 44 (GPR44), mRNA   |
| NM_004750 | Homo sapiens cytokine receptor-like factor 1 (CRLF1), mRNA   |
| NM_004382 | Homo sapiens corticotropin releasing hormone receptor 1 (CRHR1), mRNA  |
| NM_004379 | Homo sapiens cAMP responsive element binding protein 1 (CREB1), mRNA   |
| NM_004377 | Homo sapiens carnitine palmitoyltransferase I, muscle (CPT1B), mRNA  |
| NM_004748 | Homo sapiens cell cycle progression 8 protein (CPR8), mRNA   |
| NM_004074 | Homo sapiens cytochrome c oxidase subunit VIII (COX8), nuclear gene encoding mitochondrial protein, mRNA             |
| NM_004766 | Homo sapiens coatomer protein complex, subunit beta 2 (beta prime) (COPB2), mRNA                                     |
| NM_004645 | Homo sapiens coilin (COIL), mRNA   |
| NM_000614 | Homo sapiens ciliary neurotrophic factor (CNTF), mRNA  |
| NM_004368 | Homo sapiens calponin 2 (CNN2), mRNA   |
| NM_004072 | Homo sapiens chemokine-like receptor 1 (CMKLR1), mRNA  |
| NM_004071 | Homo sapiens CDC-like kinase1 (CLK1), mRNA   |
| NM_004362 | Homo sapiens calmeglin (CLGN), mRNA  |
| NM_004070 | Homo sapiens chloride channel Ka (CLCNKA), mRNA  |
| NM_004804 | Homo sapiens WD40 protein Ciaol (CIAO1), mRNA  |
| NM_004267 | Homo sapiens carbohydrate (chondroitin 6/keratan) sulfotransferase 2 (CHST2), mRNA                                   |
| NM_004067 | Homo sapiens chimerin (chimaerin) 2 (CHN2), mRNA   |
| NM_004284 | Homo sapiens chromodomain helicase DNA binding protein 1-like (CHD1L), mRNA  |
| NM_004364 | Homo sapiens CCAAT/enhancer binding protein (C/EBP), alpha (CEBPA), mRNA   |
| NM_004065 | Homo sapiens cerebellar degeneration-related protein (34kD) (CDRI), mRNA   |
| NM_004233 | Homo sapiens CD83 antigen (activated B lymphocytes, immunoglobulin superfamily) (CD83), mRNA                         |
| NM_004356 | Homo sapiens CD81 antigen (target of antiproliferative antibody 1) (CD81), mRNA                                      |
| NM_004357 | Homo sapiens CD151 antigen (CD151), mRNA   |
| NM_004350 | Homo sapiens runt-related transcription factor 3 (RUNX3), mRNA   |
| NM_004349 | Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1), mRNA |
| NM_004345 | Homo sapiens cathelicidin antimicrobial peptide (CAMP), mRNA   |
| NM_000722 | Homo sapiens calcium channel, voltage-dependent, alpha 2/delta subunit 1 (CACNA2D1), mRNA                            |
| NM_004334 | Homo sapiens bone marrow stromal cell antigen 1 (BST1), mRNA   |
| NM_004887 | Homo sapiens small inducible cytokine subfamily B (Cys-X-Cys), member 14 (BRAK) (SCYB14), mRNA                       |
| NM_004333 | Homo sapiens v-raf murine sarcoma viral oncogene homolog B1 (BRAF), mRNA   |

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| NM_004329 | Homo sapiens bone morphogenetic protein receptor, type IA (BMPRIA), mRNA  |
| NM_004827 | Homo sapiens ATP-binding cassette, sub-family G (WHITE), member 2 (ABCG2), mRNA   |
| NM_004326 | Homo sapiens B-cell CLL/lymphoma 9 (BCL9), mRNA   |
| NM_004765 | Homo sapiens B-cell CLL/lymphoma 7C (BCL7C), mRNA   |
| NM_004324 | Homo sapiens BCL2-associated X protein (BAX), mRNA  |
| NM_004656 | Homo sapiens BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) (BAP1), mRNA   |
| NM_004048 | Homo sapiens beta-2-microglobulin (B2M), mRNA   |
| NM_004655 | Homo sapiens axin 2 (conductin, axil) (AXIN2), mRNA   |
| NM_004321 | Homo sapiens axonal transport of synaptic vesicles (ATSV), mRNA   |
| NM_004888 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump), member J (ATP6J), mRNA                                |
| NM_004047 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) 21kD (ATP6F), mRNA                                     |
| NM_004046 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle (ATP5A1), mRNA |
| NM_001683 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, plasma membrane 2 (ATP2B2), mRNA  |
| NM_004314 | Homo sapiens ADP-ribosyltransferase 1 (ART1), mRNA  |
| NM_004313 | Homo sapiens arrestin, beta 2 (ARRB2), mRNA   |
| NM_004312 | Homo sapiens arrestin 3, retinal (X-arrestin) (ARR3), mRNA  |
| NM_004311 | Homo sapiens ADP-ribosylation factor-like 3 (ARL3), mRNA  |
| NM_004675 | Homo sapiens ras homolog gene family, member I (ARHI), mRNA   |
| NM_004310 | Homo sapiens ras homolog gene family, member H (ARHH), mRNA   |
| NM_004309 | Homo sapiens Rho GDP dissociation inhibitor (GDI) alpha (ARHGDI), mRNA  |
| NM_004308 | Homo sapiens Rho GTPase activating protein 1 (ARHGAP1), mRNA  |
| NM_004040 | Homo sapiens ras homolog gene family, member B (ARHB), mRNA   |
| NM_004290 | Homo sapiens ring finger protein 14 (RNF14), mRNA   |
| NM_004797 | Homo sapiens adipose most abundant gene transcript 1 (APM1), mRNA   |
| NM_004039 | Homo sapiens annexin A2 (ANXA2), mRNA   |
| NM_004306 | Homo sapiens annexin A13 (ANXA13), mRNA   |
| NM_004038 | Homo sapiens amylase, alpha 1A; salivary (AMY1A), mRNA  |
| NM_004305 | Homo sapiens bridging integrator 1 (BIN1), mRNA   |
| NM_004857 | Homo sapiens A kinase (PRKA) anchor protein 5 (AKAP5), mRNA   |
| NM_004833 | Homo sapiens absent in melanoma 2 (AIM2), mRNA  |
| NM_004208 | Homo sapiens programmed cell death 8 (apoptosis-inducing factor) (PDCD8), mRNA  |
| NM_002199 | Homo sapiens interferon regulatory factor 2 (IRF2), mRNA  |
| NM_001569 | Homo sapiens interleukin-1 receptor-associated kinase 1 (IRAK1), mRNA   |
| NM_001567 | Homo sapiens inositol polyphosphate phosphatase-like 1 (INPPL1), mRNA   |
| NM_002194 | Homo sapiens inositol polyphosphate-1-phosphatase (INPP1), mRNA   |
| NM_002111 | Homo sapiens huntingtin (Huntington disease) (HD), mRNA   |
| NM_000165 | Homo sapiens gap junction protein, alpha 1, 43kD (connexin 43) (GJA1), mRNA   |
| NM_001999 | Homo sapiens fibrillin 2 (congenital contractural arachnodactyly) (FBN2), mRNA  |
| NM_001937 | Homo sapiens dermatopontin (DPT), mRNA  |
| NM_001381 | Homo sapiens docking protein 1, 62kD (downstream of tyrosine kinase 1) (DOK1), mRNA   |
| NM_000729 | Homo sapiens cholecystokinin (CCK), mRNA  |
| NM_000486 | Homo sapiens aquaporin 2 (collecting duct) (AQP2), mRNA   |
| NM_001520 | Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit,   |

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|           | 220kD ) (GTF3C1), mRNA  |
| NM_002097 | Homo sapiens general transcription factor IIIA (GTF3A), mRNA  |
| NM_003205 | Homo sapiens transcription factor 12 (HTF4, helix-loop-helix transcription factors 4) (TCF12), mRNA   |
| NM_000440 | Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA  |
| NM_000806 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 1 (GABRA1), mRNA  |
| NM_001809 | Homo sapiens centromere protein A (17kD) (CENPA), mRNA  |
| NM_000439 | Homo sapiens proprotein convertase subtilisin/kexin type 1 (PCSK1), mRNA  |
| NM_002529 | Homo sapiens neurotrophic tyrosine kinase, receptor, type 1 (NTRK1), mRNA   |
| NM_003417 | Homo sapiens zinc finger protein 264 (ZNF264), mRNA   |
| NM_000395 | Homo sapiens colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) (CSF2RB), mRNA   |
| NM_000065 | Homo sapiens complement component 6 (C6), mRNA  |
| NM_000252 | Homo sapiens myotubular myopathy 1 (MTM1), mRNA   |
| NM_000229 | Homo sapiens lecithin-cholesterol acyltransferase (LCAT), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_000224 | Homo sapiens keratin 18 (KRT18), mRNA   |
| NM_000211 | Homo sapiens integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit) (ITGB2), mRNA |
| NM_000208 | Homo sapiens insulin receptor (INSR), mRNA  |
| NM_000206 | Homo sapiens interleukin 2 receptor, gamma (severe combined immunodeficiency) (IL2RG), mRNA   |
| NM_000416 | Homo sapiens interferon gamma receptor 1 (IFNGR1), mRNA   |
| NM_000201 | Homo sapiens intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1), mRNA  |
| NM_000350 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 4 (ABCA4), mRNA  |
| NM_000110 | Homo sapiens dihydropyrimidine dehydrogenase (DPYD), mRNA   |
| NM_000375 | Homo sapiens uroporphyrinogen III synthase (congenital erythropoietic porphyria) (UROS), mRNA   |
| NM_000459 | Homo sapiens TEK tyrosine kinase, endothelial (venous malformations, multiple cutaneous and mucosal) (TEK), mRNA                                      |
| NM_001053 | Homo sapiens somatostatin receptor 5 (SSTR5), mRNA  |
| NM_001052 | Homo sapiens somatostatin receptor 4 (SSTR4), mRNA  |
| NM_001051 | Homo sapiens somatostatin receptor 3 (SSTR3), mRNA  |
| NM_001050 | Homo sapiens somatostatin receptor 2 (SSTR2), mRNA  |
| NM_001049 | Homo sapiens somatostatin receptor 1 (SSTR1), mRNA  |
| NM_000348 | Homo sapiens steroid-5-alpha-reductase, alpha polypeptide 2 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 2) (SRD5A2), mRNA                      |
| NM_000340 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 2 (SLC2A2), mRNA   |
| NM_000338 | Homo sapiens solute carrier family 12 (sodium/potassium/chloride transporters), member 1 (SLC12A1), mRNA  |
| NM_000231 | Homo sapiens sarcoglycan, gamma (35kD dystrophin-associated glycoprotein) (SGCG), mRNA  |
| NM_001034 | Homo sapiens ribonucleotide reductase M2 polypeptide (RRM2), mRNA   |
| NM_000448 | Homo sapiens recombination activating gene 1 (RAG1), mRNA   |
| NM_000303 | Homo sapiens phosphomannomutase 2 (PMM2), mRNA  |
| NM_000302 | Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine   |

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|           | hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD), mRNA  |
| NM_000282 | Homo sapiens propionyl Coenzyme A carboxylase, alpha polypeptide (PCCA), nuclear gene encoding mitochondrial protein, mRNA       |
| NM_000281 | Homo sapiens 6-pyruvoyl-tetrahydropterin synthase/dimerization cofactor of hepatocyte nuclear factor 1 alpha (TCF1) (PCBD), mRNA |
| NM_000277 | Homo sapiens phenylalanine hydroxylase (PAH), mRNA   |
| NM_000436 | Homo sapiens 3-oxoacid CoA transferase (OXCT), nuclear gene encoding mitochondrial protein, mRNA                                 |
| NM_000274 | Homo sapiens ornithine aminotransferase (gyrate atrophy) (OAT), nuclear gene encoding mitochondrial protein, mRNA                |
| NM_000273 | Homo sapiens ocular albinism 1 (Nettleship-Falls) (OA1), mRNA  |
| NM_000272 | Homo sapiens nephronophthisis 1 (juvenile) (NPHP1), mRNA   |
| NM_000271 | Homo sapiens Niemann-Pick disease, type C1 (NPC1), mRNA  |
| NM_000269 | Homo sapiens non-metastatic cells 1, protein (NM23A) expressed in (NME1), mRNA   |
| NM_000268 | Homo sapiens neurofibromin 2 (bilateral acoustic neuroma) (NF2), mRNA  |
| NM_000267 | Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1), mRNA                         |
| NM_000434 | Homo sapiens sialidase 1 (lysosomal sialidase) (NEU1), mRNA  |
| NM_000266 | Homo sapiens Norrie disease (pseudoglioma) (NDP), mRNA   |
| NM_000265 | Homo sapiens neutrophil cytosolic factor 1 (47kD, chronic granulomatous disease, autosomal 1) (NCF1), mRNA                       |
| NM_000262 | Homo sapiens N-acetylgalactosaminidase, alpha- (NAGA), mRNA  |
| NM_000261 | Homo sapiens myocilin, trabecular meshwork inducible glucocorticoid response (MYOC), mRNA  |
| NM_000258 | Homo sapiens myosin, light polypeptide 3, alkali; ventricular, skeletal, slow (MYL3), mRNA                                       |
| NM_000432 | Homo sapiens myosin, light polypeptide 2, regulatory, cardiac, slow (MYL2), mRNA   |
| NM_000257 | Homo sapiens myosin, heavy polypeptide 7, cardiac muscle, beta (MYH7), mRNA  |
| NM_000431 | Homo sapiens mevalonate kinase (mevalonic aciduria) (MVK), mRNA  |
| NM_000255 | Homo sapiens methylmalonyl Coenzyme A mutase (MUT), nuclear gene encoding mitochondrial protein, mRNA                            |
| NM_000254 | Homo sapiens 5-methyltetrahydrofolate-homocysteine methyltransferase (MTR), mRNA   |
| NM_000253 | Homo sapiens microsomal triglyceride transfer protein (large polypeptide, 88kD) (MTP), mRNA                                      |
| NM_000250 | Homo sapiens myeloperoxidase (MPO), nuclear gene encoding mitochondrial protein, mRNA  |
| NM_000248 | Homo sapiens microphthalmia-associated transcription factor (MITF), mRNA   |
| NM_000247 | Homo sapiens MHC class I polypeptide-related sequence A (MICA), mRNA   |
| NM_000246 | Homo sapiens MHC class II transactivator (MHC2TA), mRNA  |
| NM_000245 | Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA  |
| NM_000244 | Homo sapiens multiple endocrine neoplasia I (MEN1), mRNA   |
| NM_000243 | Homo sapiens Mediterranean fever (MEFV), mRNA  |
| NM_000242 | Homo sapiens mannose-binding lectin (protein C) 2, soluble (opsonic defect) (MBL2), mRNA   |
| NM_000429 | Homo sapiens methionine adenosyltransferase I, alpha (MAT1A), mRNA   |
| NM_000240 | Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA                                       |

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| NM_000428 | Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2), mRNA  |
| NM_000238 | Homo sapiens potassium voltage-gated channel, subfamily H (eag-related), member 2 (KCNH2), mRNA                                |
| NM_000237 | Homo sapiens lipoprotein lipase (LPL), mRNA  |
| NM_000427 | Homo sapiens loricrin (LOR), mRNA  |
| NM_000236 | Homo sapiens lipase, hepatic (LIPC), mRNA  |
| NM_000235 | Homo sapiens lipase A, lysosomal acid, cholesterol esterase (Wolman disease) (LIPA), mRNA                                      |
| NM_000234 | Homo sapiens ligase I, DNA, ATP-dependent (LIG1), mRNA   |
| NM_000233 | Homo sapiens luteinizing hormone/choriogonadotropin receptor (LHCGR), mRNA   |
| NM_000228 | Homo sapiens laminin, beta 3 (nicein (125kD), kalinin (140kD), BM600 (125kD)) (LAMB3), mRNA                                    |
| NM_000426 | Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2), mRNA   |
| NM_000226 | Homo sapiens keratin 9 (epidermolytic palmoplantar keratoderma) (KRT9), mRNA   |
| NM_000422 | Homo sapiens keratin 17 (KRT17), mRNA  |
| NM_000223 | Homo sapiens keratin 12 (Meesmann corneal dystrophy) (KRT12), mRNA   |
| NM_000421 | Homo sapiens keratin 10 (epidermolytic hyperkeratosis; keratosis palmaris et plantaris) (KRT10), mRNA                          |
| NM_000222 | Homo sapiens v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT), mRNA   |
| NM_000218 | Homo sapiens potassium voltage-gated channel, KQT-like subfamily, member 1 (KCNQ1), mRNA                                       |
| NM_000219 | Homo sapiens potassium voltage-gated channel, Isk-related family, member 1 (KCNE1), mRNA                                       |
| NM_000217 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 1 (episodic ataxia with myokymia) (KCNA1), mRNA |
| NM_000216 | Homo sapiens Kallmann syndrome 1 sequence (KAL1), mRNA   |
| NM_000215 | Homo sapiens Janus kinase 3 (a protein tyrosine kinase, leukocyte) (JAK3), mRNA  |
| NM_000212 | Homo sapiens integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61) (ITGB3), mRNA   |
| NM_000209 | Homo sapiens insulin promoter factor 1, homeodomain transcription factor (IPF1), mRNA  |
| NM_000207 | Homo sapiens insulin (INS), mRNA   |
| NM_000418 | Homo sapiens interleukin 4 receptor (IL4R), mRNA   |
| NM_000417 | Homo sapiens interleukin 2 receptor, alpha (IL2RA), mRNA   |
| NM_001551 | Homo sapiens immunoglobulin (CD79A) binding protein 1 (IGBP1), mRNA  |
| NM_000203 | Homo sapiens iduronidase, alpha-L- (IDUA), mRNA  |
| NM_000415 | Homo sapiens islet amyloid polypeptide (IAPP), mRNA  |
| NM_000200 | Homo sapiens histatin 3 (HTN3), mRNA   |
| NM_001538 | Homo sapiens heat shock transcription factor 4 (HSF4), mRNA  |
| NM_000859 | Homo sapiens 3-hydroxy-3-methylglutaryl-Coenzyme A reductase (HMGCR), mRNA   |
| NM_001527 | Homo sapiens histone deacetylase 2 (HDAC2), mRNA   |
| NM_001525 | Homo sapiens hypocretin (orexin) receptor 1 (HCRT1), mRNA  |
| NM_001524 | Homo sapiens hypocretin (orexin) neuropeptide precursor (HCRT), mRNA   |
| NM_001510 | Homo sapiens glutamate receptor, ionotropic, delta 2 (GRID2), mRNA   |
| NM_000829 | Homo sapiens glutamate receptor, ionotropic, AMPA 4 (GRIA4), mRNA  |



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| NM_001496 | Homo sapiens GDNF family receptor alpha 3 (GFRA3), mRNA  |
| NM_001486 | Homo sapiens glucokinase (hexokinase 4) regulatory protein (GCKR), mRNA  |
| NM_000820 | Homo sapiens growth arrest-specific 6 (GAS6), mRNA   |
| NM_000155 | Homo sapiens galactose-1-phosphate uridylyltransferase (GALT), mRNA  |
| NM_000153 | Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA  |
| NM_000816 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, gamma 2 (GABRG2), mRNA   |
| NM_000815 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, delta (GABRD), mRNA  |
| NM_000811 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 6 (GABRA6), mRNA   |
| NM_000809 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 4 (GABRA4), mRNA   |
| NM_000808 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 3 (GABRA3), mRNA   |
| NM_000807 | Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA   |
| NM_000151 | Homo sapiens glucose-6-phosphatase, catalytic (glycogen storage disease type I, von Gierke disease) (G6PC), mRNA   |
| NM_001452 | Homo sapiens forkhead box F2 (FOXF2), mRNA   |
| NM_000138 | Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1), mRNA  |
| NM_000136 | Homo sapiens Fanconi anemia, complementation group C (FANCC), mRNA   |
| NM_001445 | Homo sapiens fatty acid binding protein 6, ileal (gastrotropin) (FABP6), mRNA  |
| NM_001442 | Homo sapiens fatty acid binding protein 4, adipocyte (FABP4), mRNA   |
| NM_001443 | Homo sapiens fatty acid binding protein 1, liver (FABP1), mRNA   |
| NM_001441 | Homo sapiens fatty acid amide hydrolase (FAAH), mRNA   |
| NM_000401 | Homo sapiens exostoses (multiple) 2 (EXT2), mRNA   |
| NM_000127 | Homo sapiens exostoses (multiple) 1 (EXT1), mRNA   |
| NM_001433 | Homo sapiens ER to nucleus signalling 1 (ERN1), mRNA   |
| NM_000122 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 3 (xeroderma pigmentosum group B complementing) (ERCC3), mRNA |
| NM_000121 | Homo sapiens erythropoietin receptor (EPOR), mRNA  |
| NM_000120 | Homo sapiens epoxide hydrolase 1, microsomal (xenobiotic) (EPHX1), mRNA  |
| NM_000119 | Homo sapiens erythrocyte membrane protein band 4.2 (EPB42), mRNA   |
| NM_001429 | Homo sapiens E1A binding protein p300 (EP300), mRNA  |
| NM_000118 | Homo sapiens endoglin (Osler-Rendu-Weber syndrome 1) (ENG), mRNA   |
| NM_000117 | Homo sapiens emerin (Emery-Dreifuss muscular dystrophy) (EMD), mRNA  |
| NM_001422 | Homo sapiens E74-like factor 5 (ets domain transcription factor) (ELF5), mRNA  |
| NM_000114 | Homo sapiens endothelin 3 (EDN3), mRNA   |
| NM_001393 | Homo sapiens extracellular matrix protein 2, female organ and adipocyte specific (ECM2), mRNA  |
| NM_000112 | Homo sapiens solute carrier family 26 (sulfate transporter), member 2 (SLC26A2), mRNA  |
| NM_001382 | Homo sapiens dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosaminophosphotransferase 1 (GlcNAc-1-P transferase) (DPAGT1), mRNA                      |
| NM_001365 | Homo sapiens discs, large (Drosophila) homolog 4 (DLG4), mRNA  |
| NM_000792 | Homo sapiens diiodinase, iodothyronine, type I (DIO1), mRNA  |
| NM_001358 | Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 15 (DDX15), mRNA   |
| NM_000107 | Homo sapiens damage-specific DNA binding protein 2 (48kD) (DDB2), mRNA   |

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| NM_001348 | Homo sapiens death-associated protein kinase 3 (DAPK3), mRNA  |
| NM_000101 | Homo sapiens cytochrome b-245, alpha polypeptide (CYBA), mRNA   |
| NM_001081 | Homo sapiens cubilin (intrinsic factor-cobalamin receptor) (CUBN), mRNA   |
| NM_001334 | Homo sapiens cathepsin O (CTSO), mRNA   |
| NM_001328 | Homo sapiens C-terminal binding protein 1 (CTBP1), mRNA   |
| NM_000554 | Homo sapiens cone-rod homeobox (CRX), mRNA  |
| NM_000096 | Homo sapiens ceruloplasmin (ferroxidase) (CP), mRNA   |
| NM_000095 | Homo sapiens cartilage oligomeric matrix protein (pseudoachondroplasia, epiphyseal dysplasia 1, multiple) (COMP), mRNA  |
| NM_000392 | Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 2 (ABCC2), mRNA                                      |
| NM_000085 | Homo sapiens chloride channel Kb (CLCNKB), mRNA   |
| NM_000084 | Homo sapiens chloride channel 5 (nephrolithiasis 2, X-linked, Dent disease) (CLCN5), mRNA                               |
| NM_001279 | Homo sapiens cell death-inducing DFFA-like effector a (CIDEA), mRNA   |
| NM_000080 | Homo sapiens cholinergic receptor, nicotinic, epsilon polypeptide (CHRNE), mRNA   |
| NM_000751 | Homo sapiens cholinergic receptor, nicotinic, delta polypeptide (CHRND), mRNA   |
| NM_000747 | Homo sapiens cholinergic receptor, nicotinic, beta polypeptide 1 (muscle) (CHRNB1), mRNA                                |
| NM_000079 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 1 (muscle) (CHRNA1), mRNA                               |
| NM_001273 | Homo sapiens chromodomain helicase DNA binding protein 4 (CHD4), mRNA   |
| NM_001271 | Homo sapiens chromodomain helicase DNA binding protein 2 (CHD2), mRNA   |
| NM_001270 | Homo sapiens chromodomain helicase DNA binding protein 1 (CHD1), mRNA   |
| NM_000078 | Homo sapiens cholesteryl ester transfer protein, plasma (CETP), mRNA  |
| NM_000076 | Homo sapiens cyclin-dependent kinase inhibitor 1C (p57, Kip2) (CDKN1C), mRNA  |
| NM_001258 | Homo sapiens cyclin-dependent kinase 3 (CDK3), mRNA   |
| NM_001251 | Homo sapiens CD68 antigen (CD68), mRNA  |
| NM_000074 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 5 (hyper-IgM syndrome) (TNFSF5), mRNA                   |
| NM_000073 | Homo sapiens CD3G antigen, gamma polypeptide (TiT3 complex) (CD3G), mRNA  |
| NM_001249 | Homo sapiens ectonucleoside triphosphate diphosphohydrolase 5 (ENTPD5), mRNA  |
| NM_001248 | Homo sapiens ectonucleoside triphosphate diphosphohydrolase 3 (ENTPD3), mRNA  |
| NM_001246 | Homo sapiens ectonucleoside triphosphate diphosphohydrolase 2 (ENTPD2), mRNA  |
| NM_000072 | Homo sapiens CD36 antigen (collagen type I receptor, thrombospondin receptor) (CD36), mRNA                              |
| NM_000591 | Homo sapiens CD14 antigen (CD14), mRNA  |
| NM_000071 | Homo sapiens cystathionine-beta-synthase (CBS), mRNA  |
| NM_000388 | Homo sapiens calcium-sensing receptor (hypocalciuric hypercalcemia 1, severe neonatal hyperparathyroidism) (CASR), mRNA |
| NM_000070 | Homo sapiens calpain 3, (p94) (CAPN3), mRNA   |
| NM_000069 | Homo sapiens calcium channel, voltage-dependent, L type, alpha 1S subunit (CACNA1S), mRNA                               |
| NM_001215 | Homo sapiens carbonic anhydrase VI (CA6), mRNA  |
| NM_000067 | Homo sapiens carbonic anhydrase II (CA2), mRNA  |

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| NM_000606 | Homo sapiens complement component 8, gamma polypeptide (C8G), mRNA   |
| NM_000066 | Homo sapiens complement component 8, beta polypeptide (C8B), mRNA  |
| NM_000562 | Homo sapiens complement component 8, alpha polypeptide (C8A), mRNA   |
| NM_000587 | Homo sapiens complement component 7 (C7), mRNA   |
| NM_000064 | Homo sapiens complement component 3 (C3), mRNA   |
| NM_000061 | Homo sapiens Bruton agammaglobulinemia tyrosine kinase (BTK), mRNA   |
| NM_001206 | Homo sapiens basic transcription element binding protein 1 (BTEB1), mRNA   |
| NM_000060 | Homo sapiens biotinidase (BTD), mRNA   |
| NM_001201 | Homo sapiens bone morphogenetic protein 3 (osteogenic) (BMP3), mRNA  |
| NM_001200 | Homo sapiens bone morphogenetic protein 2 (BMP2), mRNA   |
| NM_000386 | Homo sapiens bleomycin hydrolase (BLMH), mRNA  |
| NM_000057 | Homo sapiens Bloom syndrome (BLM), mRNA  |
| NM_001198 | Homo sapiens PR domain containing 1, with ZNF domain (PRDM1), mRNA   |
| NM_001196 | Homo sapiens BH3 interacting domain death agonist (BID), mRNA  |
| NM_000056 | Homo sapiens branched chain keto acid dehydrogenase E1, beta polypeptide (maple syrup urine disease) (BCKDHB), nuclear gene encoding mitochondrial protein, mRNA |
| NM_000465 | Homo sapiens BRCA1 associated RING domain 1 (BARD1), mRNA  |
| NM_000705 | Homo sapiens ATPase, H+/K+ exchanging, beta polypeptide (ATP4B), mRNA  |
| NM_000049 | Homo sapiens aspartoacylase (aminoacylase 2, Canavan disease) (ASPA), mRNA   |
| NM_000046 | Homo sapiens arylsulfatase B (ARSB), mRNA  |
| NM_000639 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 6 (TNFSF6), mRNA   |
| NM_000042 | Homo sapiens apolipoprotein H (beta-2-glycoprotein I) (APOH), mRNA   |
| NM_000041 | Homo sapiens apolipoprotein E (APOE), mRNA   |
| NM_000040 | Homo sapiens apolipoprotein C-III (APOC3), mRNA  |
| NM_000039 | Homo sapiens apolipoprotein A-I (APOA1), mRNA  |
| NM_000038 | Homo sapiens adenomatosis polyposis coli (APC), mRNA   |
| NM_001157 | Homo sapiens annexin A11 (ANXA11), mRNA  |
| NM_001147 | Homo sapiens angiopoietin 2 (ANGPT2), mRNA   |
| NM_001145 | Homo sapiens angiogenin, ribonuclease, RNase A family, 5 (ANG), mRNA   |
| NM_000036 | Homo sapiens adenosine monophosphate deaminase 1 (isoform M) (AMPD1), mRNA   |
| NM_001141 | Homo sapiens arachidonate 15-lipoxygenase, second type (ALOX15B), mRNA   |
| NM_000035 | Homo sapiens aldolase B, fructose-bisphosphate (ALDOB), mRNA   |
| NM_000034 | Homo sapiens aldolase A, fructose-bisphosphate (ALDOA), mRNA   |
| NM_000032 | Homo sapiens aminolevulinate, delta-, synthase 2 (sideroblastic/hypochromic anemia) (ALAS2), nuclear gene encoding mitochondrial protein, mRNA                   |
| NM_000030 | Homo sapiens alanine-glyoxylate aminotransferase (oxalosis I; hyperoxaluria I; glycolicaciduria; serine-pyruvate aminotransferase) (AGXT), mRNA                  |
| NM_001126 | Homo sapiens adenylosuccinate synthase (ADSS), mRNA  |
| NM_000684 | Homo sapiens adrenergic, beta-1-, receptor (ADRB1), mRNA   |
| NM_001125 | Homo sapiens ADP-ribosylarginine hydrolase (ADPRH), mRNA   |
| NM_001116 | Homo sapiens adenylate cyclase 9 (ADCY9), mRNA   |
| NM_001115 | Homo sapiens adenylate cyclase 8 (brain) (ADCY8), mRNA   |
| NM_001114 | Homo sapiens adenylate cyclase 7 (ADCY7), mRNA   |
| NM_001109 | Homo sapiens a disintegrin and metalloproteinase domain 8 (ADAM8), mRNA  |
| NM_001110 | Homo sapiens a disintegrin and metalloproteinase domain 10 (ADAM10), mRNA  |
| NM_001108 | Homo sapiens acylphosphatase 2, muscle type (ACYP2), mRNA  |
| NM_001107 | Homo sapiens acylphosphatase 1, erythrocyte (common) type (ACYP1), mRNA  |

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| NM_001104 | Homo sapiens actinin, alpha 3 (ACTN3), mRNA   |
| NM_001086 | Homo sapiens arylacetamide deacetylase (esterase) (AADAC), mRNA   |
| NM_001043 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2 (SLC6A2), mRNA                |
| NM_000532 | Homo sapiens propionyl Coenzyme A carboxylase, beta polypeptide (PCCB), nuclear gene encoding mitochondrial protein, mRNA |
| NM_002579 | Homo sapiens paralemmin (PALM), mRNA  |
| NM_002443 | Homo sapiens microseminoprotein, beta- (MSMB), mRNA   |
| NM_002418 | Homo sapiens motilin (MLN), mRNA  |
| NM_002300 | Homo sapiens lactate dehydrogenase B (LDHB), mRNA   |
| NM_002243 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15), mRNA                                 |
| NM_001534 | Homo sapiens homeo box 11-like 1 (HOX11L1), mRNA  |
| NM_001454 | Homo sapiens forkhead box J1 (FOXJ1), mRNA  |
| NM_004001 | Homo sapiens Fc fragment of IgG, low affinity IIb, receptor for (CD32) (FCGR2B), mRNA                                     |
| NM_001276 | Homo sapiens chitinase 3-like 1 (cartilage glycoprotein-39) (CHI3L1), mRNA  |
| NM_001752 | Homo sapiens catalase (CAT), mRNA   |
| NM_001610 | Homo sapiens acid phosphatase 2, lysosomal (ACP2), mRNA   |
| NM_003461 | Homo sapiens zyxin (ZYX), mRNA  |
| NM_003460 | Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2), mRNA   |
| NM_003459 | Homo sapiens solute carrier family 30 (zinc transporter), member 3 (SLC30A3), mRNA  |
| NM_003430 | Homo sapiens zinc finger protein 91 (HPF7, HTF10) (ZNF91), mRNA   |
| NM_003429 | Homo sapiens zinc finger protein 85 (HPF4, HTF1) (ZNF85), mRNA  |
| NM_003428 | Homo sapiens zinc finger protein 84 (HPF2) (ZNF84), mRNA  |
| NM_003416 | Homo sapiens zinc finger protein 7 (KOX 4, clone HF.16) (ZNF7), mRNA  |
| NM_003427 | Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA   |
| NM_003426 | Homo sapiens zinc finger protein 74 (Cos52) (ZNF74), mRNA   |
| NM_003425 | Homo sapiens zinc finger protein 45 (a Kruppel-associated box (KRAB) domain polypeptide) (ZNF45), mRNA                    |
| NM_003423 | Homo sapiens zinc finger protein 43 (HTF6) (ZNF43), mRNA  |
| NM_003422 | Homo sapiens zinc finger protein 42 (myeloid-specific retinoic acid- responsive) (ZNF42), mRNA                            |
| NM_003420 | Homo sapiens zinc finger protein 35 (clone HF.10) (ZNF35), mRNA   |
| NM_003458 | Homo sapiens bassoon (presynaptic cytomatrix protein) (BSN), mRNA   |
| NM_003456 | Homo sapiens zinc finger protein 205 (ZNF205), mRNA   |
| NM_003453 | Homo sapiens zinc finger protein 198 (ZNF198), mRNA   |
| NM_003450 | Homo sapiens zinc finger protein 174 (ZNF174), mRNA   |
| NM_003447 | Homo sapiens zinc finger protein 165 (ZNF165), mRNA   |
| NM_003446 | Homo sapiens zinc finger protein 157 (HZF22) (ZNF157), mRNA   |
| NM_003443 | Homo sapiens zinc finger protein 151 (pHZ-67) (ZNF151), mRNA  |
| NM_003442 | Homo sapiens zinc finger protein 143 (clone pHZ-1) (ZNF143), mRNA   |
| NM_003441 | Homo sapiens zinc finger protein 141 (clone pHZ-44) (ZNF141), mRNA  |
| NM_003440 | Homo sapiens zinc finger protein 140 (clone pHZ-39) (ZNF140), mRNA  |
| NM_003438 | Homo sapiens zinc finger protein 137 (clone pHZ-30) (ZNF137), mRNA  |
| NM_003437 | Homo sapiens zinc finger protein 136 (clone pHZ-20) (ZNF136), mRNA  |
| NM_003436 | Homo sapiens zinc finger protein 135 (clone pHZ-17) (ZNF135), mRNA  |
| NM_003435 | Homo sapiens zinc finger protein 134 (clone pHZ-15) (ZNF134), mRNA  |
| NM_003434 | Homo sapiens zinc finger protein 133 (clone pHZ-13) (ZNF133), mRNA  |
| NM_003433 | Homo sapiens zinc finger protein 132 (clone pHZ-12) (ZNF132), mRNA  |
| NM_003431 | Homo sapiens zinc finger protein 124 (HZF-16) (ZNF124), mRNA  |

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| NM_003411 | Homo sapiens zinc finger protein, Y-linked (ZFY), mRNA  |
| NM_003410 | Homo sapiens zinc finger protein, X-linked (ZFX), mRNA  |
| NM_003405 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide (YWHAH), mRNA  |
| NM_003404 | Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAH), mRNA |
| NM_000380 | Homo sapiens xeroderma pigmentosum, complementation group A (XPA), mRNA   |
| NM_003931 | Homo sapiens WAS protein family, member 1 (WASF1), mRNA   |
| NM_003384 | Homo sapiens vaccinia related kinase 1 (VRK1), mRNA   |
| NM_003383 | Homo sapiens very low density lipoprotein receptor (VLDLR), mRNA  |
| NM_003382 | Homo sapiens vasoactive intestinal peptide receptor 2 (VIPR2), mRNA   |
| NM_003381 | Homo sapiens vasoactive intestinal peptide (VIP), mRNA  |
| NM_003380 | Homo sapiens vimentin (VIM), mRNA   |
| NM_003377 | Homo sapiens vascular endothelial growth factor B (VEGFB), mRNA   |
| NM_003376 | Homo sapiens vascular endothelial growth factor (VEGF), mRNA  |
| NM_000376 | Homo sapiens vitamin D (1,25- dihydroxyvitamin D3) receptor (VDR), mRNA   |
| NM_003375 | Homo sapiens voltage-dependent anion channel 2 (VDAC2), mRNA  |
| NM_003374 | Homo sapiens voltage-dependent anion channel 1 (VDAC1), mRNA  |
| NM_003371 | Homo sapiens vav 2 oncogene (VAV2), mRNA  |
| NM_003370 | Homo sapiens vasodilator-stimulated phosphoprotein (VASP), mRNA   |
| NM_003762 | Homo sapiens vesicle-associated membrane protein 4 (VAMP4), mRNA  |
| NM_003369 | Homo sapiens UV radiation resistance associated gene (UVRAG), mRNA  |
| NM_003577 | Homo sapiens undifferentiated embryonic cell transcription factor 1 (UTF1), mRNA                                    |
| NM_003470 | Homo sapiens ubiquitin specific protease 7 (herpes virus-associated) (USP7), mRNA                                   |
| NM_003481 | Homo sapiens ubiquitin specific protease 5 (isopeptidase T) (USP5), mRNA  |
| NM_003363 | Homo sapiens ubiquitin specific protease 4 (proto-oncogene) (USP4), mRNA  |
| NM_003368 | Homo sapiens ubiquitin specific protease 1 (USP1), mRNA   |
| NM_003940 | Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA  |
| NM_003367 | Homo sapiens upstream transcription factor 2, c-fos interacting (USF2), mRNA  |
| NM_003366 | Homo sapiens ubiquinol-cytochrome c reductase core protein II (UQCRC2), mRNA  |
| NM_003365 | Homo sapiens ubiquinol-cytochrome c reductase core protein I (UQCRC1), mRNA   |
| NM_003364 | Homo sapiens uridine phosphorylase (UP), mRNA   |
| NM_003361 | Homo sapiens uromodulin (uromucoid, Tamm-Horsfall glycoprotein) (UMOD), mRNA  |
| NM_003709 | Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA  |
| NM_003360 | Homo sapiens UDP glycosyltransferase 8 (UDP-galactose ceramide galactosyltransferase) (UGT8), mRNA                  |
| NM_001074 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B7 (UGT2B7), mRNA  |
| NM_001077 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B17 (UGT2B17), mRNA                                      |
| NM_001076 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B15 (UGT2B15), mRNA                                      |
| NM_001075 | Homo sapiens UDP glycosyltransferase 2 family, polypeptide B10 (UGT2B10), mRNA                                      |
| NM_003359 | Homo sapiens UDP-glucose dehydrogenase (UGDH), mRNA   |
| NM_003358 | Homo sapiens UDP-glucose ceramide glucosyltransferase (UGCG), mRNA  |

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| NM_003357 | Homo sapiens uteroglobin (UGB), mRNA   |
| NM_003352 | Homo sapiens ubiquitin-like 1 (sentrin) (UBL1), mRNA   |
| NM_003347 | Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3), mRNA   |
| NM_003337 | Homo sapiens ubiquitin-conjugating enzyme E2B (RAD6 homolog) (UBE2B), mRNA   |
| NM_003336 | Homo sapiens ubiquitin-conjugating enzyme E2A (RAD6 homolog) (UBE2A), mRNA   |
| NM_003335 | Homo sapiens ubiquitin-activating enzyme E1-like (UBE1L), mRNA   |
| NM_000550 | Homo sapiens tyrosinase-related protein 1 (TYRP1), mRNA  |
| NM_000372 | Homo sapiens tyrosinase (oculocutaneous albinism IA) (TYR), mRNA   |
| NM_001071 | Homo sapiens thymidylate synthetase (TYMS), mRNA   |
| NM_003331 | Homo sapiens tyrosine kinase 2 (TYK2), mRNA  |
| NM_003330 | Homo sapiens thioredoxin reductase 1 (TXNRD1), mRNA  |
| NM_003329 | Homo sapiens thioredoxin (TXN), mRNA   |
| NM_003328 | Homo sapiens TXK tyrosine kinase (TXK), mRNA   |
| NM_003324 | Homo sapiens tubby like protein 3 (TULP3), mRNA  |
| NM_003323 | Homo sapiens tubby like protein 2 (TULP2), mRNA  |
| NM_003321 | Homo sapiens Tu translation elongation factor, mitochondrial (TUFM), mRNA  |
| NM_001070 | Homo sapiens tubulin, gamma 1 (TUBG1), mRNA  |
| NM_001069 | Homo sapiens tubulin, beta polypeptide (TUBB), mRNA  |
| NM_000371 | Homo sapiens transthyretin (prealbumin, amyloidosis type I) (TTR), mRNA  |
| NM_000370 | Homo sapiens tocopherol (alpha) transfer protein (ataxia (Friedreich-like) with vitamin E deficiency) (TTPA), mRNA |
| NM_003319 | Homo sapiens titin (TTN), mRNA   |
| NM_003318 | Homo sapiens TTK protein kinase (TTK), mRNA  |
| NM_003317 | Homo sapiens thyroid transcription factor 1 (TTF1), mRNA   |
| NM_003315 | Homo sapiens tetratricopeptide repeat domain 2 (TTC2), mRNA  |
| NM_003314 | Homo sapiens tetratricopeptide repeat domain 1 (TTC1), mRNA  |
| NM_003311 | Homo sapiens tumor suppressing subtransferable candidate 3 (TSSC3), mRNA   |
| NM_003310 | Homo sapiens tumor suppressing subtransferable candidate 1 (TSSC1), mRNA   |
| NM_000369 | Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA   |
| NM_000549 | Homo sapiens thyroid stimulating hormone, beta (TSHB), mRNA  |
| NM_003496 | Homo sapiens transformation/transcription domain-associated protein (TRRAP), mRNA                                  |
| NM_003301 | Homo sapiens thyrotropin-releasing hormone receptor (TRHR), mRNA   |
| NM_003299 | Homo sapiens tumor rejection antigen (gp96) 1 (TRA1), mRNA   |
| NM_003298 | Homo sapiens nuclear receptor subfamily 2, group C, member 2 (NR2C2), mRNA   |
| NM_003296 | Homo sapiens testis specific protein 1 (probe H4-1 p3-1) (TPX1), mRNA  |
| NM_003295 | Homo sapiens tumor protein, translationally-controlled 1 (TPT1), mRNA  |
| NM_003595 | Homo sapiens tyrosylprotein sulfotransferase 2 (TPST2), mRNA   |
| NM_003292 | Homo sapiens translocated promoter region (to activated MET oncogene) (TPR), mRNA                                  |
| NM_003291 | Homo sapiens tripeptidyl peptidase II (TPP2), mRNA   |
| NM_000547 | Homo sapiens thyroid peroxidase (TPO), nuclear gene encoding mitochondrial protein, mRNA                           |
| NM_003290 | Homo sapiens tropomyosin 4 (TPM4), mRNA  |
| NM_003289 | Homo sapiens tropomyosin 2 (beta) (TPM2), mRNA   |
| NM_000366 | Homo sapiens tropomyosin 1 (alpha) (TPM1), mRNA  |
| NM_000365 | Homo sapiens triosephosphate isomerase 1 (TPI1), mRNA  |
| NM_003288 | Homo sapiens tumor protein D52-like 2 (TPD52L2), mRNA  |
| NM_003287 | Homo sapiens tumor protein D52-like 1 (TPD52L1), mRNA  |

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| NM_003935 | Homo sapiens topoisomerase (DNA) III beta (TOP3B), mRNA   |
| NM_001067 | Homo sapiens topoisomerase (DNA) II alpha (170kD) (TOP2A), mRNA   |
| NM_003285 | Homo sapiens tenascin R (restrictin, janusin) (TNR), mRNA   |
| NM_003284 | Homo sapiens transition protein 1 (during histone to protamine replacement) (TNPI), mRNA  |
| NM_000364 | Homo sapiens troponin T2, cardiac (TNNT2), mRNA   |
| NM_003283 | Homo sapiens troponin T1, skeletal, slow (TNNT1), mRNA  |
| NM_000363 | Homo sapiens troponin I, cardiac (TNNI3), mRNA  |
| NM_003282 | Homo sapiens troponin I, skeletal, fast (TNNI2), mRNA   |
| NM_003281 | Homo sapiens troponin I, skeletal, slow (TNNI1), mRNA   |
| NM_003279 | Homo sapiens troponin C2, fast (TNNC2), mRNA  |
| NM_003280 | Homo sapiens troponin C, slow (TNNC1), mRNA   |
| NM_003985 | Homo sapiens tyrosine kinase, non-receptor, 1 (TNK1), mRNA  |
| NM_001244 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8), mRNA  |
| NM_001252 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 7 (TNFSF7), mRNA  |
| NM_003326 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 4 (tax-transcriptionally activated glycoprotein 1, 34kD) (TNFSF4), mRNA |
| NM_003808 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 13 (TNFSF13), mRNA  |
| NM_003809 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 12 (TNFSF12), mRNA  |
| NM_003810 | Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10), mRNA  |
| NM_001243 | Homo sapiens tumor necrosis factor receptor superfamily, member 8 (TNFRSF8), mRNA   |
| NM_001242 | Homo sapiens tumor necrosis factor receptor superfamily, member 7 (TNFRSF7), mRNA   |
| NM_000043 | Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), mRNA   |
| NM_003327 | Homo sapiens tumor necrosis factor receptor superfamily, member 4 (TNFRSF4), mRNA   |
| NM_001066 | Homo sapiens tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B), mRNA   |
| NM_001065 | Homo sapiens tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A), mRNA   |
| NM_001192 | Homo sapiens tumor necrosis factor receptor superfamily, member 17 (TNFRSF17), mRNA   |
| NM_003820 | Homo sapiens tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator) (TNFRSF14), mRNA                        |
| NM_003790 | Homo sapiens tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein) (TNFRSF12), mRNA  |
| NM_002546 | Homo sapiens tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin) (TNFRSF11B), mRNA                                 |
| NM_003839 | Homo sapiens tumor necrosis factor receptor superfamily, member 11a, activator of NFkB (TNFRSF11A), mRNA                                |
| NM_003840 | Homo sapiens tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain (TNFRSF10D), mRNA                |
| NM_003842 | Homo sapiens tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B), mRNA   |
| NM_003844 | Homo sapiens tumor necrosis factor receptor superfamily, member 10a   |

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|           | (TNFRSF10A), mRNA   |
| NM_003276 | Homo sapiens thymopoietin (TMPO), mRNA  |
| NM_003275 | Homo sapiens tropomodulin (TMOD), mRNA  |
| NM_003274 | Homo sapiens transmembrane protein 1 (TMEM1), mRNA  |
| NM_003692 | Homo sapiens transmembrane protein with EGF-like and two follistatin-like domains 1 (TMEFF1), mRNA  |
| NM_003273 | Homo sapiens transmembrane 7 superfamily member 2 (TM7SF2), mRNA  |
| NM_003272 | Homo sapiens transmembrane 7 superfamily member 1 (upregulated in kidney) (TM7SF1), mRNA  |
| NM_003271 | Homo sapiens transmembrane 4 superfamily member 7 (TM4SF7), mRNA  |
| NM_003270 | Homo sapiens transmembrane 4 superfamily member 6 (TM4SF6), mRNA  |
| NM_003963 | Homo sapiens transmembrane 4 superfamily member 5 (TM4SF5), mRNA  |
| NM_003269 | Homo sapiens nuclear receptor subfamily 2, group E, member 1 (NR2E1), mRNA  |
| NM_003266 | Homo sapiens toll-like receptor 4 (TLR4), mRNA  |
| NM_003265 | Homo sapiens toll-like receptor 3 (TLR3), mRNA  |
| NM_003264 | Homo sapiens toll-like receptor 2 (TLR2), mRNA  |
| NM_003263 | Homo sapiens toll-like receptor 1 (TLR1), mRNA  |
| NM_003258 | Homo sapiens thymidine kinase 1, soluble (TK1), mRNA  |
| NM_003257 | Homo sapiens tight junction protein 1 (zona occludens 1) (TJP1), mRNA   |
| NM_003256 | Homo sapiens tissue inhibitor of metalloproteinase 4 (TIMP4), mRNA  |
| NM_003254 | Homo sapiens tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor) (TIMP1), mRNA               |
| NM_003597 | Homo sapiens TGFB inducible early growth response 2 (TIEG2), mRNA   |
| NM_003253 | Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA  |
| NM_000460 | Homo sapiens thrombopoietin (myeloproliferative leukemia virus oncogene ligand, megakaryocyte growth and development factor) (THPO), mRNA |
| NM_003249 | Homo sapiens thimet oligopeptidase 1 (THOP1), mRNA  |
| NM_003248 | Homo sapiens thrombospondin 4 (THBS4), mRNA   |
| NM_003247 | Homo sapiens thrombospondin 2 (THBS2), mRNA   |
| NM_003246 | Homo sapiens thrombospondin 1 (THBS1), mRNA   |
| NM_000361 | Homo sapiens thrombomodulin (THBD), mRNA  |
| NM_000360 | Homo sapiens tyrosine hydroxylase (TH), mRNA  |
| NM_003241 | Homo sapiens transglutaminase 4 (prostate) (TGM4), mRNA   |
| NM_003245 | Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3), mRNA                                 |
| NM_000359 | Homo sapiens transglutaminase 1 (K polypeptide epidermal type I, protein-glutamine-gamma-glutamyltransferase) (TGM1), mRNA                |
| NM_003243 | Homo sapiens transforming growth factor, beta receptor III (betaglycan, 300kD) (TGFB3), mRNA  |
| NM_003242 | Homo sapiens transforming growth factor, beta receptor II (70-80kD) (TGFB2), mRNA   |
| NM_000358 | Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA   |
| NM_003239 | Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA   |
| NM_003238 | Homo sapiens transforming growth factor, beta 2 (TGFB2), mRNA   |
| NM_003236 | Homo sapiens transforming growth factor, alpha (TGFA), mRNA   |
| NM_003234 | Homo sapiens transferrin receptor (p90, CD71) (TFRC), mRNA  |
| NM_003227 | Homo sapiens transferrin receptor 2 (TFR2), mRNA  |
| NM_003226 | Homo sapiens trefoil factor 3 (intestinal) (TFF3), mRNA   |
| NM_003225 | Homo sapiens trefoil factor 1 (breast cancer, estrogen-inducible sequence expressed in) (TFF1), mRNA                                      |
| NM_003224 | Homo sapiens ADP-ribosylation factor related protein 1 (ARFRP1), mRNA   |



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| NM_003219 | Homo sapiens telomerase reverse transcriptase (TERT), mRNA   |
| NM_003673 | Homo sapiens titin-cap (telethonin) (TCAP), mRNA   |
| NM_003217 | Homo sapiens testis enhanced gene transcript (TEGT), mRNA  |
| NM_003216 | Homo sapiens thyrotrophic embryonic factor (TEF), mRNA   |
| NM_003213 | Homo sapiens TEA domain family member 4 (TEAD4), mRNA  |
| NM_003211 | Homo sapiens thymine-DNA glycosylase (TDG), mRNA   |
| NM_003608 | Homo sapiens G protein-coupled receptor 65 (GPR65), mRNA   |
| NM_000355 | Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA   |
| NM_001062 | Homo sapiens transcobalamin I (vitamin B12 binding protein, R binder family) (TCN1), mRNA  |
| NM_003202 | Homo sapiens transcription factor 7 (T-cell specific, HMG-box) (TCF7), mRNA  |
| NM_003201 | Homo sapiens transcription factor 6-like 1 (mitochondrial transcription factor 1-like) (TCF6L1), mRNA                            |
| NM_003199 | Homo sapiens transcription factor 4 (TCF4), mRNA   |
| NM_003206 | Homo sapiens transcription factor 21 (TCF21), mRNA   |
| NM_000545 | Homo sapiens transcription factor 1, hepatic; LF-B1, hepatic nuclear factor (HNF1), albumin proximal factor (TCF1), mRNA         |
| NM_003198 | Homo sapiens transcription elongation factor B (SIII), polypeptide 3 (110kD, elongin A) (TCEB3), mRNA                            |
| NM_001060 | Homo sapiens thromboxane A2 receptor (TBXA2R), mRNA  |
| NM_003194 | Homo sapiens TATA box binding protein (TBP), mRNA  |
| NM_003192 | Homo sapiens tubulin-specific chaperone c (TBCC), mRNA   |
| NM_000116 | Homo sapiens tafazzin (cardiomyopathy, dilated 3A (X-linked); endocardial fibroelastosis 2; Barth syndrome) (TAZ), mRNA          |
| NM_000353 | Homo sapiens tyrosine aminotransferase (TAT), nuclear gene encoding mitochondrial protein, mRNA                                  |
| NM_003191 | Homo sapiens threonyl-tRNA synthetase (TARS), mRNA   |
| NM_003190 | Homo sapiens TAP binding protein (tapasin) (TAPBP), mRNA   |
| NM_003189 | Homo sapiens T-cell acute lymphocytic leukemia 1 (TAL1), mRNA  |
| NM_003188 | Homo sapiens mitogen-activated protein kinase kinase kinase 7 (MAP3K7), mRNA   |
| NM_003487 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, N, 68kD (RNA-binding protein 56) (TAF2N), mRNA |
| NM_003187 | Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, G, 32kD (TAF2G), mRNA                          |
| NM_001057 | Homo sapiens tachykinin receptor 2 (TACR2), mRNA   |
| NM_003180 | Homo sapiens synaptotagmin 5 (SYT5), mRNA  |
| NM_003895 | Homo sapiens synaptojanin 1 (SYNJ1), mRNA  |
| NM_003490 | Homo sapiens synapsin III (SYN3), mRNA   |
| NM_003178 | Homo sapiens synapsin II (SYN2), mRNA  |
| NM_003177 | Homo sapiens spleen tyrosine kinase (SYK), mRNA  |
| NM_003176 | Homo sapiens synaptonemal complex protein 1 (SYCP1), mRNA  |
| NM_003172 | Homo sapiens surfactant 1 (SURF1), mRNA  |
| NM_003167 | Homo sapiens sulfotransferase family, cytosolic, 2A, dehydroepiandrosterone (DHEA) -preferring, member 1 (SULT2A1), mRNA         |
| NM_001056 | Homo sapiens sulfotransferase family, cytosolic, 1C, member 1 (SULT1C1), mRNA  |
| NM_001054 | Homo sapiens sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2 (SULT1A2), mRNA                                 |
| NM_001055 | Homo sapiens sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1 (SULT1A1), mRNA                                 |
| NM_003165 | Homo sapiens syntaxin binding protein 1 (STXBPI), mRNA   |

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| NM_003163 | Homo sapiens syntaxin 1B (STX1B), mRNA   |
| NM_003159 | Homo sapiens serine/threonine kinase 9 (STK9), mRNA  |
| NM_003158 | Homo sapiens serine/threonine kinase 6 (STK6), mRNA  |
| NM_003157 | Homo sapiens serine/threonine kinase 2 (STK2), mRNA  |
| NM_003600 | Homo sapiens serine/threonine kinase 15 (STK15), mRNA  |
| NM_003160 | Homo sapiens serine/threonine kinase 13 (aurora/IPL1-like) (STK13), mRNA   |
| NM_003156 | Homo sapiens stromal interaction molecule 1 (STIM1), mRNA  |
| NM_003155 | Homo sapiens stanniocalcin 1 (STC1), mRNA  |
| NM_003877 | Homo sapiens STAT induced STAT inhibitor-2 (STATI2), mRNA  |
| NM_003154 | Homo sapiens statherin (STATH), mRNA   |
| NM_003153 | Homo sapiens signal transducer and activator of transcription 6, interleukin-4 induced (STAT6), mRNA                             |
| NM_003152 | Homo sapiens signal transducer and activator of transcription 5A (STAT5A), mRNA  |
| NM_003151 | Homo sapiens signal transducer and activator of transcription 4 (STAT4), mRNA  |
| NM_003150 | Homo sapiens signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3), mRNA                      |
| NM_000349 | Homo sapiens steroidogenic acute regulatory protein (STAR), mRNA   |
| NM_003473 | Homo sapiens signal transducing adaptor molecule (SH3 domain and ITAM motif) 1 (STAM), mRNA                                      |
| NM_003149 | Homo sapiens src homology three (SH3) and cysteine rich domain (STAC), mRNA  |
| NM_001048 | Homo sapiens somatostatin (SST), mRNA  |
| NM_003146 | Homo sapiens structure specific recognition protein 1 (SSRP1), mRNA  |
| NM_003745 | Homo sapiens JAK binding protein (SSI-1), mRNA   |
| NM_001080 | Homo sapiens aldehyde dehydrogenase 5 family, member A1 (succinate-semialdehyde dehydrogenase) (ALDH5A1), mRNA                   |
| NM_003139 | Homo sapiens signal recognition particle receptor ('docking protein') (SRPR), mRNA   |
| NM_003138 | Homo sapiens SFRS protein kinase 2 (SRPK2), mRNA   |
| NM_003135 | Homo sapiens signal recognition particle 19kD (SRP19), mRNA  |
| NM_003132 | Homo sapiens spermidine synthase (SRM), mRNA   |
| NM_003130 | Homo sapiens sorcin (SRI), mRNA  |
| NM_001047 | Homo sapiens steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1) (SRD5A1), mRNA |
| NM_003743 | Homo sapiens nuclear receptor coactivator 1 (NCOA1), mRNA  |
| NM_003128 | Homo sapiens spectrin, beta, non-erythrocytic 1 (SPTBN1), mRNA   |
| NM_003127 | Homo sapiens spectrin, alpha, non-erythrocytic 1 (alpha-fodrin) (SPTAN1), mRNA   |
| NM_003126 | Homo sapiens spectrin, alpha, erythrocytic 1 (elliptocytosis 2) (SPTA1), mRNA  |
| NM_003125 | Homo sapiens small proline-rich protein 1B (cornifin) (SPRR1B), mRNA   |
| NM_003124 | Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR), mRNA                                       |
| NM_003123 | Homo sapiens sialophorin (gpL115, leukosialin, CD43) (SPN), mRNA   |
| NM_003121 | Homo sapiens Spi-B transcription factor (Spi-1/PU.1 related) (SPIB), mRNA  |
| NM_003120 | Homo sapiens spleen focus forming virus (SFFV) proviral integration oncogene sp1 (SPI1), mRNA                                    |
| NM_003119 | Homo sapiens spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive) (SPG7), mRNA                            |
| NM_003118 | Homo sapiens secreted protein, acidic, cysteine-rich (osteonectin) (SPARC), mRNA   |
| NM_003112 | Homo sapiens Sp4 transcription factor (SP4), mRNA  |

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| NM_003107 | Homo sapiens SRY (sex determining region Y)-box 4 (SOX4), mRNA   |
| NM_003108 | Homo sapiens SRY (sex determining region Y)-box 11 (SOX11), mRNA   |
| NM_003104 | Homo sapiens sorbitol dehydrogenase (SORD), mRNA   |
| NM_003102 | Homo sapiens superoxide dismutase 3, extracellular (SOD3), mRNA  |
| NM_003794 | Homo sapiens sorting nexin 4 (SNX4), mRNA  |
| NM_003100 | Homo sapiens sorting nexin 2 (SNX2), mRNA  |
| NM_003094 | Homo sapiens small nuclear ribonucleoprotein polypeptide E (SNRPE), mRNA   |
| NM_003092 | Homo sapiens small nuclear ribonucleoprotein polypeptide B" (SNRPB2), mRNA   |
| NM_003090 | Homo sapiens small nuclear ribonucleoprotein polypeptide A' (SNRPA1), mRNA   |
| NM_003089 | Homo sapiens small nuclear ribonucleoprotein 70kD polypeptide (RNP antigen) (SNRP70), mRNA                                     |
| NM_003498 | Homo sapiens stannin (SNN), mRNA   |
| NM_003087 | Homo sapiens synuclein, gamma (breast cancer-specific protein 1) (SNCG), mRNA  |
| NM_003083 | Homo sapiens small nuclear RNA activating complex, polypeptide 2, 45kD (SNAPC2), mRNA  |
| NM_003082 | Homo sapiens small nuclear RNA activating complex, polypeptide 1, 43kD (SNAPC1), mRNA  |
| NM_003081 | Homo sapiens synaptosomal-associated protein, 25kD (SNAP25), mRNA  |
| NM_003078 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3 (SMARCD3), mRNA |
| NM_003077 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2 (SMARCD2), mRNA |
| NM_003076 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 (SMARCD1), mRNA |
| NM_003075 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 (SMARCC2), mRNA |
| NM_003074 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1 (SMARCC1), mRNA |
| NM_003073 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1 (SMARCB1), mRNA |
| NM_003601 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5 (SMARCA5), mRNA |
| NM_003071 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3), mRNA |
| NM_003070 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2), mRNA |
| NM_003069 | Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1 (SMARCA1), mRNA |
| NM_003982 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 7 (SLC7A7), mRNA                     |
| NM_003046 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 2 (SLC7A2), mRNA                     |
| NM_003045 | Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 1 (SLC7A1), mRNA                     |
| NM_003043 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, taurine), member 6 (SLC6A6), mRNA                          |
| NM_001045 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, serotonin), member 4 (SLC6A4), mRNA                        |
| NM_001044 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, dopamine),   |

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|           | member 3 (SLC6A3), mRNA  |
| NM_003042 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, GABA), member 1 (SLC6A1), mRNA   |
| NM_003044 | Homo sapiens solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 (SLC6A12), mRNA   |
| NM_000453 | Homo sapiens solute carrier family 5 (sodium iodide symporter), member 5 (SLC5A5), mRNA  |
| NM_003041 | Homo sapiens solute carrier family 5 (sodium/glucose cotransporter), member 2 (SLC5A2), mRNA   |
| NM_000343 | Homo sapiens solute carrier family 5 (sodium/glucose cotransporter), member 1 (SLC5A1), mRNA   |
| NM_003040 | Homo sapiens solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1) (SLC4A2), mRNA  |
| NM_000342 | Homo sapiens solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group) (SLC4A1), mRNA  |
| NM_000341 | Homo sapiens solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1 (SLC3A1), mRNA |
| NM_001860 | Homo sapiens solute carrier family 31 (copper transporters), member 2 (SLC31A2), mRNA  |
| NM_001859 | Homo sapiens solute carrier family 31 (copper transporters), member 1 (SLC31A1), mRNA  |
| NM_003039 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 5 (SLC2A5), mRNA  |
| NM_001042 | Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 4 (SLC2A4), mRNA  |
| NM_003705 | Homo sapiens solute carrier family 25 (mitochondrial carrier, Aralar), member 12 (SLC25A12), mRNA  |
| NM_003060 | Homo sapiens solute carrier family 22 (organic cation transporter), member 5 (SLC22A5), mRNA   |
| NM_003058 | Homo sapiens solute carrier family 22 (organic cation transporter), member 2 (SLC22A2), mRNA   |
| NM_003057 | Homo sapiens solute carrier family 22 (organic cation transporter), member 1 (SLC22A1), mRNA   |
| NM_003562 | Homo sapiens solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11 (SLC25A11), mRNA  |
| NM_003038 | Homo sapiens solute carrier family 1 (glutamate/neutral amino acid transporter), member 4 (SLC1A4), mRNA   |
| NM_003056 | Homo sapiens solute carrier family 19 (folate transporter), member 1 (SLC19A1), mRNA   |
| NM_003055 | Homo sapiens solute carrier family 18 (vesicular acetylcholine), member 3 (SLC18A3), mRNA  |
| NM_003054 | Homo sapiens solute carrier family 18 (vesicular monoamine), member 2 (SLC18A2), mRNA  |
| NM_003053 | Homo sapiens solute carrier family 18 (vesicular monoamine), member 1 (SLC18A1), mRNA  |
| NM_003052 | Homo sapiens solute carrier family 34 (sodium phosphate), member 1 (SLC34A1), mRNA   |
| NM_003051 | Homo sapiens solute carrier family 16 (monocarboxylic acid transporters), member 1 (SLC16A1), mRNA   |
| NM_003984 | Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2), mRNA   |

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| NM_000339 | Homo sapiens solute carrier family 12 (sodium/chloride transporters), member 3 (SLC12A3), mRNA  |
| NM_001046 | Homo sapiens solute carrier family 12 (sodium/potassium/chloride transporters), member 2 (SLC12A2), mRNA  |
| NM_000452 | Homo sapiens solute carrier family 10 (sodium/bile acid cotransporter family), member 2 (SLC10A2), mRNA   |
| NM_003049 | Homo sapiens solute carrier family 10 (sodium/bile acid cotransporter family), member 1 (SLC10A1), mRNA   |
| NM_003037 | Homo sapiens signaling lymphocytic activation molecule (SLAM), mRNA   |
| NM_003616 | Homo sapiens survival of motor neuron protein interacting protein 1 (SIP1), mRNA  |
| NM_003035 | Homo sapiens TAL1 (SCL) interrupting locus (SIL), mRNA  |
| NM_003032 | Homo sapiens sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase) (SIAT1), mRNA   |
| NM_001041 | Homo sapiens sucrase-isomaltase (SI), mRNA  |
| NM_003027 | Homo sapiens SH3-domain GRB2-like 3 (SH3GL3), mRNA  |
| NM_003026 | Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA  |
| NM_003025 | Homo sapiens SH3-domain GRB2-like 1 (SH3GL1), mRNA  |
| NM_003023 | Homo sapiens SH3-domain binding protein 2 (SH3BP2), mRNA  |
| NM_003022 | Homo sapiens SH3 domain binding glutamic acid-rich protein like (SH3BGL), mRNA  |
| NM_000199 | Homo sapiens N-sulfoglucosamine sulfohydrolase (sulfamidase) (SGSH), mRNA   |
| NM_003020 | Homo sapiens secretory granule, neuroendocrine protein 1 (7B2 protein) (SGNE1), mRNA  |
| NM_000337 | Homo sapiens sarcoglycan, delta (35kD dystrophin-associated glycoprotein) (SGCD), mRNA  |
| NM_000232 | Homo sapiens sarcoglycan, beta (43kD dystrophin-associated glycoprotein) (SGCB), mRNA   |
| NM_003019 | Homo sapiens surfactant, pulmonary-associated protein D (SFTPD), mRNA   |
| NM_003018 | Homo sapiens surfactant, pulmonary-associated protein C (SFTPC), mRNA   |
| NM_000542 | Homo sapiens surfactant, pulmonary-associated protein B (SFTPB), mRNA   |
| NM_003011 | Homo sapiens SET translocation (myeloid leukemia-associated) (SET), mRNA  |
| NM_003010 | Homo sapiens mitogen-activated protein kinase kinase 4 (MAP2K4), mRNA   |
| NM_003009 | Homo sapiens selenoprotein W, 1 (SEPW1), mRNA   |
| NM_003008 | Homo sapiens semenogelin II (SEMG2), mRNA   |
| NM_003007 | Homo sapiens semenogelin I (SEMG1), mRNA  |
| NM_003966 | Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA |
| NM_003002 | Homo sapiens succinate dehydrogenase complex, subunit D, integral membrane protein (SDHD), nuclear gene encoding mitochondrial protein, mRNA                            |
| NM_002999 | Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4), mRNA  |
| NM_002997 | Homo sapiens syndecan 1 (SDC1), mRNA  |
| NM_002996 | Homo sapiens small inducible cytokine subfamily D (Cys-X3-Cys), member 1 (fractalkine, neurotactin) (SCYD1), mRNA   |
| NM_003175 | Homo sapiens small inducible cytokine subfamily C, member 2 (SCYC2), mRNA   |
| NM_002993 | Homo sapiens small inducible cytokine subfamily B (Cys-X-Cys), member 6 (granulocyte chemotactic protein 2) (SCYB6), mRNA   |
| NM_002994 | Homo sapiens small inducible cytokine subfamily B (Cys-X-Cys), member 5 (epithelial-derived neutrophil-activating peptide 78) (SCYB5), mRNA                             |

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| NM_002985 | Homo sapiens small inducible cytokine A5 (RANTES) (SCYA5), mRNA  |
| NM_002991 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 24 (SCYA24), mRNA                                      |
| NM_002990 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 22 (SCYA22), mRNA                                      |
| NM_002989 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 21 (SCYA21), mRNA                                      |
| NM_002988 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 18, pulmonary and activation-regulated (SCYA18), mRNA  |
| NM_002987 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 17 (SCYA17), mRNA                                      |
| NM_002986 | Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 11 (eotaxin) (SCYA11), mRNA                            |
| NM_002979 | Homo sapiens sterol carrier protein 2 (SCP2), mRNA   |
| NM_001039 | Homo sapiens sodium channel, nonvoltage-gated 1, gamma (SCNN1G), mRNA  |
| NM_002978 | Homo sapiens sodium channel, nonvoltage-gated 1, delta (SCNN1D), mRNA  |
| NM_001038 | Homo sapiens sodium channel, nonvoltage-gated 1 alpha (SCNN1A), mRNA   |
| NM_002977 | Homo sapiens sodium channel, voltage-gated, type IX, alpha polypeptide (SCN9A), mRNA                                       |
| NM_002976 | Homo sapiens sodium channel, voltage-gated, type VI, alpha polypeptide (SCN6A), mRNA                                       |
| NM_000334 | Homo sapiens sodium channel, voltage-gated, type IV, alpha polypeptide (SCN4A), mRNA                                       |
| NM_001037 | Homo sapiens sodium channel, voltage-gated, type I, beta polypeptide (SCN1B), mRNA   |
| NM_002975 | Homo sapiens stem cell growth factor; lymphocyte secreted C-type lectin (SCGF), mRNA                                       |
| NM_003843 | Homo sapiens sciellin (SCEL), mRNA   |
| NM_002973 | Homo sapiens spinocerebellar ataxia 2 (olivopontocerebellar ataxia 2, autosomal dominant, ataxin 2) (SCA2), mRNA           |
| NM_000332 | Homo sapiens spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1), mRNA           |
| NM_002971 | Homo sapiens special AT-rich sequence binding protein 1 (binds to nuclear matrix/scaffold-associating DNA's) (SATB1), mRNA |
| NM_002970 | Homo sapiens spermidine/spermine N1-acetyltransferase (SAT), mRNA  |
| NM_003870 | Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA  |
| NM_002967 | Homo sapiens scaffold attachment factor B (SAFB), mRNA   |
| NM_000331 | Homo sapiens serum amyloid A1 (SAA1), mRNA   |
| NM_001036 | Homo sapiens ryanodine receptor 3 (RZR3), mRNA   |
| NM_001035 | Homo sapiens ryanodine receptor 2 (cardiac) (RZR2), mRNA   |
| NM_002956 | Homo sapiens restin (Reed-Steinberg cell-expressed intermediate filament-associated protein) (RSN), mRNA                   |
| NM_001033 | Homo sapiens ribonucleotide reductase M1 polypeptide (RRM1), mRNA  |
| NM_002955 | Homo sapiens ras responsive element binding protein 1 (RREB1), mRNA  |
| NM_003942 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 4 (RPS6KA4), mRNA  |
| NM_002953 | Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 1 (RPS6KA1), mRNA  |
| NM_002951 | Homo sapiens ribophorin II (RPN2), mRNA  |
| NM_002950 | Homo sapiens ribophorin I (RPN1), mRNA   |
| NM_000329 | Homo sapiens retinal pigment epithelium-specific protein (65kD) (RPE65), mRNA  |

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|           | mRNA  |
| NM_002947 | Homo sapiens replication protein A3 (14kD) (RPA3), mRNA   |
| NM_002946 | Homo sapiens replication protein A2 (32kD) (RPA2), mRNA   |
| NM_002945 | Homo sapiens replication protein A1 (70kD) (RPA1), mRNA   |
| NM_000328 | Homo sapiens retinitis pigmentosa GTPase regulator (RPGR), mRNA   |
| NM_002943 | Homo sapiens RAR-related orphan receptor A (RORA), mRNA   |
| NM_000327 | Homo sapiens retinal outer segment membrane protein 1 (ROM1), mRNA  |
| NM_003799 | Homo sapiens RNA (guanine-7-) methyltransferase (RNMT), mRNA  |
| NM_002939 | Homo sapiens ribonuclease/angiogenin inhibitor (RNH), mRNA  |
| NM_003800 | Homo sapiens RNA guanylyltransferase and 5'-phosphatase (RNGTT), mRNA   |
| NM_002938 | Homo sapiens ring finger protein 4 (RNF4), mRNA   |
| NM_002940 | Homo sapiens ATP-binding cassette, sub-family E (OABP), member 1 (ABCE1), mRNA                                      |
| NM_002936 | Homo sapiens ribonuclease H1 (RNASEH1), mRNA  |
| NM_002935 | Homo sapiens ribonuclease, RNase A family, 3 (eosinophil cationic protein) (RNASE3), mRNA                           |
| NM_002934 | Homo sapiens ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2), mRNA                  |
| NM_003796 | Homo sapiens RPB5-mediating protein (RMP), mRNA   |
| NM_003821 | Homo sapiens receptor-interacting serine-threonine kinase 2 (RIPK2), mRNA   |
| NM_003687 | Homo sapiens LIM domain protein (RIL), mRNA   |
| NM_002929 | Homo sapiens rhodopsin kinase (RHOK), mRNA  |
| NM_000324 | Homo sapiens Rhesus blood group-associated glycoprotein (RHAG), mRNA  |
| NM_003835 | Homo sapiens regulator of G-protein signalling 9 (RGS9), mRNA   |
| NM_003617 | Homo sapiens regulator of G-protein signalling 5 (RGS5), mRNA   |
| NM_002923 | Homo sapiens regulator of G-protein signalling 2, 24kD (RGS2), mRNA   |
| NM_002922 | Homo sapiens regulator of G-protein signalling 1 (RGS1), mRNA   |
| NM_002928 | Homo sapiens regulator of G-protein signalling 16 (RGS16), mRNA   |
| NM_002926 | Homo sapiens regulator of G-protein signalling 12 (RGS12), mRNA   |
| NM_003834 | Homo sapiens regulator of G-protein signalling 11 (RGS11), mRNA   |
| NM_002921 | Homo sapiens retinal G protein coupled receptor (RGR), mRNA   |
| NM_000538 | Homo sapiens regulatory factor X-associated protein (RFXAP), mRNA   |
| NM_003721 | Homo sapiens regulatory factor X-associated ankyrin-containing protein (RFXANK), mRNA                               |
| NM_002918 | Homo sapiens regulatory factor X, 1 (influences HLA class II expression) (RFX1), mRNA                               |
| NM_002916 | Homo sapiens replication factor C (activator 1) 4 (37kD) (RFC4), mRNA   |
| NM_002915 | Homo sapiens replication factor C (activator 1) 3 (38kD) (RFC3), mRNA   |
| NM_002914 | Homo sapiens replication factor C (activator 1) 2 (40kD) (RFC2), mRNA   |
| NM_003704 | Homo sapiens gene with multiple splice variants near HD locus on 4p16.3 (RES4-22), mRNA                             |
| NM_002908 | Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog (REL), mRNA                                   |
| NM_002909 | Homo sapiens regenerating islet-derived 1 alpha (pancreatic stone protein, pancreatic thread protein) (REG1A), mRNA |
| NM_000322 | Homo sapiens retinal degeneration, slow (retinitis pigmentosa 7) (RDS), mRNA  |
| NM_002905 | Homo sapiens retinol dehydrogenase 5 (11-cis and 9-cis) (RDH5), mRNA  |
| NM_002903 | Homo sapiens recoverin (RCV1), mRNA   |
| NM_002902 | Homo sapiens reticulocalbin 2, EF-hand calcium binding domain (RCN2), mRNA  |
| NM_002901 | Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA  |

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| NM_002896 | Homo sapiens RNA binding motif protein 4 (RBM4), mRNA   |
| NM_002895 | Homo sapiens retinoblastoma-like 1 (p107) (RBL1), mRNA  |
| NM_000321 | Homo sapiens retinoblastoma 1 (including osteosarcoma) (RB1), mRNA  |
| NM_000966 | Homo sapiens retinoic acid receptor, gamma (RARG), mRNA   |
| NM_000964 | Homo sapiens retinoic acid receptor, alpha (RARA), mRNA   |
| NM_002885 | Homo sapiens RAPI, GTPase activating protein 1 (RAPIGA1), mRNA  |
| NM_002884 | Homo sapiens RAPIA, member of RAS oncogene family (RAPIA), mRNA   |
| NM_002883 | Homo sapiens Ran GTPase activating protein 1 (RANGAPI), mRNA  |
| NM_002881 | Homo sapiens v-ral simian leukemia viral oncogene homolog B (ras related; GTP binding protein) (RALB), mRNA |
| NM_002871 | Homo sapiens RAB interacting factor (RABIF), mRNA   |
| NM_003929 | Homo sapiens RAB7, member RAS oncogene family-like 1 (RAB7L1), mRNA   |
| NM_002869 | Homo sapiens RAB6, member RAS oncogene family (RAB6), mRNA  |
| NM_002868 | Homo sapiens RAB5B, member RAS oncogene family (RAB5B), mRNA  |
| NM_002867 | Homo sapiens RAB3B, member RAS oncogene family (RAB3B), mRNA  |
| NM_002866 | Homo sapiens RAB3A, member RAS oncogene family (RAB3A), mRNA  |
| NM_002870 | Homo sapiens RAB13, member RAS oncogene family (RAB13), mRNA  |
| NM_000320 | Homo sapiens quinoid dihydropteridine reductase (QDPR), mRNA  |
| NM_002864 | Homo sapiens pregnancy-zone protein (PZP), mRNA   |
| NM_002863 | Homo sapiens phosphorylase, glycogen; liver (Hers disease, glycogen storage disease type VI) (PYGL), mRNA   |
| NM_002862 | Homo sapiens phosphorylase, glycogen; brain (PYGB), nuclear gene encoding mitochondrial protein, mRNA       |
| NM_002860 | Homo sapiens pyrroline-5-carboxylate synthetase (glutamate gamma-semialdehyde synthetase) (PYCS), mRNA      |
| NM_000319 | Homo sapiens peroxisome receptor 1 (PXR1), mRNA   |
| NM_002859 | Homo sapiens paxillin (PXN), mRNA   |
| NM_002857 | Homo sapiens peroxisomal farnesylated protein (PXF), mRNA   |
| NM_002854 | Homo sapiens parvalbumin (PVALB), mRNA  |
| NM_002852 | Homo sapiens pentaxin-related gene, rapidly induced by IL-1 beta (PTX3), mRNA                               |
| NM_000317 | Homo sapiens 6-pyruvoyltetrahydropterin synthase (PTS), mRNA  |
| NM_002851 | Homo sapiens protein tyrosine phosphatase, receptor-type, Z polypeptide 1 (PTPRZ1), mRNA                    |
| NM_002850 | Homo sapiens protein tyrosine phosphatase, receptor type, S (PTPRS), mRNA                                   |
| NM_002846 | Homo sapiens protein tyrosine phosphatase, receptor type, N (PTPRN), mRNA                                   |
| NM_002845 | Homo sapiens protein tyrosine phosphatase, receptor type, M (PTPRM), mRNA                                   |
| NM_002844 | Homo sapiens protein tyrosine phosphatase, receptor type, K (PTPRK), mRNA                                   |
| NM_002843 | Homo sapiens protein tyrosine phosphatase, receptor type, J (PTPRJ), mRNA                                   |
| NM_002842 | Homo sapiens protein tyrosine phosphatase, receptor type, H (PTPRH), mRNA                                   |
| NM_002840 | Homo sapiens protein tyrosine phosphatase, receptor type, F (PTPRF), mRNA                                   |
| NM_002839 | Homo sapiens protein tyrosine phosphatase, receptor type, D (PTPRD), mRNA                                   |
| NM_002824 | Homo sapiens parathyrosin (PTMS), mRNA  |
| NM_002823 | Homo sapiens prothymosin, alpha (gene sequence 28) (PTMA), mRNA   |
| NM_000316 | Homo sapiens parathyroid hormone receptor 1 (PTHRI), mRNA   |
| NM_002820 | Homo sapiens parathyroid hormone-like hormone (PTHLH), mRNA   |
| NM_000315 | Homo sapiens parathyroid hormone (PTH), mRNA  |
| NM_000960 | Homo sapiens prostaglandin I2 (prostaglandin) receptor (IP) (PTGIR), mRNA                                   |
| NM_000959 | Homo sapiens prostaglandin F receptor (FP) (PTGFR), mRNA  |
| NM_000958 | Homo sapiens prostaglandin E receptor 4 (subtype EP4) (PTGER4), mRNA  |
| NM_000957 | Homo sapiens prostaglandin E receptor 3 (subtype EP3) (PTGER3), mRNA  |
| NM_000955 | Homo sapiens prostaglandin E receptor 1 (subtype EP1), 42kD (PTGER1),                                       |



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|           | mRNA  |
| NM_000954 | Homo sapiens prostaglandin D2 synthase (21kD, brain) (PTGDS), mRNA  |
| NM_000314 | Homo sapiens phosphatase and tensin homolog (mutated in multiple advanced cancers 1) (PTEN), mRNA                   |
| NM_000952 | Homo sapiens platelet-activating factor receptor (PTAFR), mRNA  |
| NM_002818 | Homo sapiens proteasome (prosome, macropain) activator subunit 2 (PA28 beta) (PSME2), mRNA                          |
| NM_002811 | Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7), mRNA               |
| NM_002806 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 6 (PSMC6), mRNA                                   |
| NM_002805 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 5 (PSMC5), mRNA                                   |
| NM_002804 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 3 (PSMC3), mRNA                                   |
| NM_002803 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 2 (PSMC2), mRNA                                   |
| NM_002802 | Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 1 (PSMC1), mRNA                                   |
| NM_002800 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional protease 2) (PSMB9), mRNA |
| NM_002799 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 7 (PSMB7), mRNA                                    |
| NM_002797 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 5 (PSMB5), mRNA                                    |
| NM_002796 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 4 (PSMB4), mRNA                                    |
| NM_002795 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 3 (PSMB3), mRNA                                    |
| NM_002794 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 2 (PSMB2), mRNA                                    |
| NM_002793 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1), mRNA                                    |
| NM_002801 | Homo sapiens proteasome (prosome, macropain) subunit, beta type, 10 (PSMB10), mRNA                                  |
| NM_002790 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 5 (PSMA5), mRNA                                   |
| NM_002788 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 3 (PSMA3), mRNA                                   |
| NM_002786 | Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 1 (PSMA1), mRNA                                   |
| NM_002783 | Homo sapiens pregnancy specific beta-1-glycoprotein 7 (PSG7), mRNA  |
| NM_002781 | Homo sapiens pregnancy specific beta-1-glycoprotein 5 (PSG5), mRNA  |
| NM_002780 | Homo sapiens pregnancy specific beta-1-glycoprotein 4 (PSG4), mRNA  |
| NM_002785 | Homo sapiens pregnancy specific beta-1-glycoprotein 11 (Note redefinition of symbol) (PSG11), mRNA                  |
| NM_002784 | Homo sapiens pregnancy specific beta-1-glycoprotein 9 (PSG9), mRNA  |
| NM_002779 | Homo sapiens pleckstrin and Sec7 domain protein (PSD), mRNA   |
| NM_002776 | Homo sapiens kallikrein 10 (KLK10), mRNA  |
| NM_002774 | Homo sapiens kallikrein 6 (neurosin, zyme) (KLK6), mRNA   |
| NM_002773 | Homo sapiens protease, serine, 8 (prostasin) (PRSS8), mRNA  |
| NM_002770 | Homo sapiens protease, serine, 2 (trypsin 2) (PRSS2), mRNA  |

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| NM_002769 | Homo sapiens protease, serine, 1 (trypsin 1) (PRSS1), mRNA  |
| NM_003619 | Homo sapiens protease, serine, 12 (neurotrypsin, motopsin) (PRSS12), mRNA   |
| NM_002775 | Homo sapiens protease, serine, 11 (IGF binding) (PRSS11), mRNA  |
| NM_002767 | Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2), mRNA                                     |
| NM_002766 | Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 1 (PRPSAP1), mRNA                                     |
| NM_002765 | Homo sapiens phosphoribosyl pyrophosphate synthetase 2 (PRPS2), mRNA  |
| NM_002764 | Homo sapiens phosphoribosyl pyrophosphate synthetase 1 (PRPS1), mRNA  |
| NM_003891 | Homo sapiens protein Z, vitamin K-dependent plasma glycoprotein (PROZ), mRNA  |
| NM_002763 | Homo sapiens prospero-related homeobox 1 (PROX1), mRNA  |
| NM_000313 | Homo sapiens protein S (alpha) (PROS1), mRNA  |
| NM_000312 | Homo sapiens protein C (inactivator of coagulation factors Va and VIIIa) (PROC), mRNA   |
| NM_002762 | Homo sapiens protamine 2 (PRM2), mRNA   |
| NM_002761 | Homo sapiens protamine 1 (PRM1), mRNA   |
| NM_000949 | Homo sapiens prolactin receptor (PRLR), mRNA  |
| NM_000948 | Homo sapiens prolactin (PRL), mRNA  |
| NM_002759 | Homo sapiens protein kinase, interferon-inducible double stranded RNA dependent (PRKR), mRNA                                  |
| NM_002756 | Homo sapiens mitogen-activated protein kinase kinase 3 (MAP2K3), mRNA   |
| NM_002749 | Homo sapiens mitogen-activated protein kinase 7 (MAPK7), mRNA   |
| NM_002745 | Homo sapiens mitogen-activated protein kinase 1 (MAPK1), mRNA   |
| NM_002751 | Homo sapiens mitogen-activated protein kinase 11 (MAPK11), mRNA   |
| NM_002753 | Homo sapiens mitogen-activated protein kinase 10 (MAPK10), mRNA   |
| NM_002743 | Homo sapiens protein kinase C substrate 80K-H (PRKCSH), mRNA  |
| NM_002742 | Homo sapiens protein kinase C, mu (PRKCM), mRNA   |
| NM_002741 | Homo sapiens protein kinase C-like 1 (PRKCL1), mRNA   |
| NM_002740 | Homo sapiens protein kinase C, iota (PRKCI), mRNA   |
| NM_002738 | Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA  |
| NM_002737 | Homo sapiens protein kinase C, alpha (PRKCA), mRNA  |
| NM_002736 | Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA  |
| NM_002734 | Homo sapiens protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1) (PRKAR1A), mRNA       |
| NM_002733 | Homo sapiens protein kinase, AMP-activated, gamma 1 non-catalytic subunit (PRKAG1), mRNA                                      |
| NM_002731 | Homo sapiens protein kinase, cAMP-dependent, catalytic, beta (PRKACB), mRNA   |
| NM_002730 | Homo sapiens protein kinase, cAMP-dependent, catalytic, alpha (PRKACA), mRNA  |
| NM_000947 | Homo sapiens primase, polypeptide 2A (58kD) (PRIM2A), mRNA  |
| NM_000946 | Homo sapiens primase, polypeptide 1 (49kD) (PRIM1), mRNA  |
| NM_002728 | Homo sapiens proteoglycan 2, bone marrow (natural killer cell activator, eosinophil granule major basic protein) (PRG2), mRNA |
| NM_002727 | Homo sapiens proteoglycan 1, secretory granule (PRG1), mRNA   |
| NM_002726 | Homo sapiens prolyl endopeptidase (PREP), mRNA  |
| NM_002725 | Homo sapiens proline arginine-rich end leucine-rich repeat protein (PRELP), mRNA  |
| NM_002723 | Homo sapiens proline-rich protein BstNI subfamily 4 (PRB4), mRNA  |
| NM_002722 | Homo sapiens pancreatic polypeptide (PPY), mRNA   |

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| NM_000310 | Homo sapiens palmitoyl-protein thioesterase 1 (ceroid-lipofuscinosis, neuronal 1, infantile) (PPT1), mRNA   |
| NM_002720 | Homo sapiens protein phosphatase 4 (formerly X), catalytic subunit (PPP4C), mRNA  |
| NM_002719 | Homo sapiens protein phosphatase 2, regulatory subunit B (B56), gamma isoform (PPP2R5C), mRNA   |
| NM_002715 | Homo sapiens protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform (PPP2CA), mRNA   |
| NM_002713 | Homo sapiens protein phosphatase 1, regulatory (inhibitor) subunit 8 (PPP1R8), mRNA   |
| NM_002712 | Homo sapiens protein phosphatase 1, regulatory subunit 7 (PPP1R7), mRNA   |
| NM_002714 | Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10), mRNA   |
| NM_002710 | Homo sapiens protein phosphatase 1, catalytic subunit, gamma isoform (PPP1CC), mRNA   |
| NM_002709 | Homo sapiens protein phosphatase 1, catalytic subunit, beta isoform (PPP1CB), mRNA  |
| NM_002708 | Homo sapiens protein phosphatase 1, catalytic subunit, alpha isoform (PPP1CA), mRNA   |
| NM_000309 | Homo sapiens protoporphyrinogen oxidase (PPOX), mRNA  |
| NM_002706 | Homo sapiens protein phosphatase 1B (formerly 2C), magnesium-dependent, beta isoform (PPM1B), mRNA  |
| NM_002705 | Homo sapiens periplakin (PPL), mRNA   |
| NM_000943 | Homo sapiens peptidylprolyl isomerase C (cyclophilin C) (PPIC), mRNA  |
| NM_000308 | Homo sapiens protective protein for beta-galactosidase (galactosialidosis) (PPGB), mRNA   |
| NM_002703 | Homo sapiens phosphoribosyl pyrophosphate amidotransferase (PPAT), mRNA   |
| NM_003712 | Homo sapiens phosphatidic acid phosphatase type 2C (PPAP2C), mRNA   |
| NM_003713 | Homo sapiens phosphatidic acid phosphatase type 2B (PPAP2B), mRNA   |
| NM_003711 | Homo sapiens phosphatidic acid phosphatase type 2A (PPAP2A), mRNA   |
| NM_002702 | Homo sapiens POU domain, class 6, transcription factor 1 (POU6F1), mRNA   |
| NM_002701 | Homo sapiens POU domain, class 5, transcription factor 1 (POU5F1), mRNA   |
| NM_002700 | Homo sapiens POU domain, class 4, transcription factor 3 (POU4F3), mRNA   |
| NM_000307 | Homo sapiens POU domain, class 3, transcription factor 4 (POU3F4), mRNA   |
| NM_002699 | Homo sapiens POU domain, class 3, transcription factor 1 (POU3F1), mRNA   |
| NM_002697 | Homo sapiens POU domain, class 2, transcription factor 1 (POU2F1), mRNA   |
| NM_000306 | Homo sapiens POU domain, class 1, transcription factor 1 (Pit1, growth hormone factor 1) (POU1F1), mRNA   |
| NM_000446 | Homo sapiens paraoxonase 1 (PON1), mRNA   |
| NM_000939 | Homo sapiens proopiomelanocortin (adrenocorticotropin/ beta-lipotropin/ alpha-melanocyte stimulating hormone/ beta-melanocyte stimulating hormone/ beta-endorphin) (POMC), mRNA |
| NM_002693 | Homo sapiens polymerase (DNA directed), gamma (POLG), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_002692 | Homo sapiens polymerase (DNA directed), epsilon 2 (POLE2), mRNA   |
| NM_002691 | Homo sapiens polymerase (DNA directed), delta 1, catalytic subunit (125kD) (POLD1), mRNA  |
| NM_002690 | Homo sapiens polymerase (DNA directed), beta (POLB), mRNA   |
| NM_003967 | Homo sapiens putative neurotransmitter receptor (PNR), mRNA   |
| NM_002686 | Homo sapiens phenylethanolamine N-methyltransferase (PNMT), mRNA  |
| NM_002677 | Homo sapiens peripheral myelin protein 2 (PMP2), mRNA   |
| NM_000304 | Homo sapiens peripheral myelin protein 22 (PMP22), mRNA   |
| NM_002676 | Homo sapiens phosphomannomutase 1 (PMM1), mRNA  |

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| NM_002674 | Homo sapiens pro-melanin-concentrating hormone (PMCH), mRNA   |
| NM_002668 | Homo sapiens proteolipid protein 2 (colonic epithelium-enriched) (PLP2), mRNA   |
| NM_000935 | Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase) 2 (PLOD2), mRNA                                |
| NM_002667 | Homo sapiens phospholamban (PLN), mRNA  |
| NM_002666 | Homo sapiens perilipin (PLIN), mRNA   |
| NM_002665 | Homo sapiens plasminogen-like (PLGL), mRNA  |
| NM_000301 | Homo sapiens plasminogen (PLG), mRNA  |
| NM_000445 | Homo sapiens plectin 1, intermediate filament binding protein, 500kD (PLEC1), mRNA  |
| NM_002663 | Homo sapiens phospholipase D2 (PLD2), mRNA  |
| NM_002662 | Homo sapiens phospholipase D1, phosphatidylcholine-specific (PLD1), mRNA  |
| NM_002661 | Homo sapiens phospholipase C, gamma 2 (phosphatidylinositol-specific) (PLCG2), mRNA   |
| NM_002660 | Homo sapiens phospholipase C, gamma 1 (formerly subtype 148) (PLCG1), mRNA  |
| NM_000933 | Homo sapiens phospholipase C, beta 4 (PLCB4), mRNA  |
| NM_002659 | Homo sapiens plasminogen activator, urokinase receptor (PLAUR), mRNA  |
| NM_002658 | Homo sapiens plasminogen activator, urokinase (PLAU), mRNA  |
| NM_002655 | Homo sapiens pleiomorphic adenoma gene 1 (PLAG1), mRNA  |
| NM_000929 | Homo sapiens phospholipase A2, group V (PLA2G5), mRNA   |
| NM_003706 | Homo sapiens phospholipase A2, group IVC (cytosolic, calcium-independent) (PLA2G4C), mRNA   |
| NM_000300 | Homo sapiens phospholipase A2, group IIA (platelets, synovial fluid) (PLA2G2A), nuclear gene encoding mitochondrial protein, mRNA |
| NM_003561 | Homo sapiens phospholipase A2, group X (PLA2G10), mRNA  |
| NM_002654 | Homo sapiens pyruvate kinase, muscle (PKM2), mRNA   |
| NM_003691 | Homo sapiens serine/threonine kinase 16 (STK16), mRNA   |
| NM_000296 | Homo sapiens polycystic kidney disease 1 (autosomal dominant) (PKD1), mRNA  |
| NM_003607 | Homo sapiens Ser-Thr protein kinase related to the myotonic dystrophy protein kinase (PK428), mRNA                                |
| NM_003678 | Homo sapiens gene from NF2/meningioma region of 22q12 (PK1.3), mRNA   |
| NM_000325 | Homo sapiens paired-like homeodomain transcription factor 2 (PITX2), mRNA   |
| NM_002653 | Homo sapiens paired-like homeodomain transcription factor 1 (PITX1), mRNA   |
| NM_002652 | Homo sapiens prolactin-induced protein (PIP), mRNA  |
| NM_003558 | Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type I, beta (PIP5K1B), mRNA  |
| NM_003557 | Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type I, alpha (PIP5K1A), mRNA   |
| NM_003746 | Homo sapiens dynein, cytoplasmic, light polypeptide (PIN), mRNA   |
| NM_002648 | Homo sapiens pim-1 oncogene (PIM1), mRNA  |
| NM_002651 | Homo sapiens phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB), mRNA  |
| NM_002643 | Homo sapiens phosphatidylinositol glycan, class F (PIGF), mRNA  |
| NM_002642 | Homo sapiens phosphatidylinositol glycan, class C (PIGC), mRNA  |
| NM_002638 | Homo sapiens protease inhibitor 3, skin-derived (SKALP) (PI3), mRNA   |
| NM_000294 | Homo sapiens phosphorylase kinase, gamma 2 (testis) (PHKG2), mRNA   |
| NM_000293 | Homo sapiens phosphorylase kinase, beta (PHKB), mRNA  |
| NM_000292 | Homo sapiens phosphorylase kinase, alpha 2 (liver) (PHKA2), mRNA  |
| NM_002637 | Homo sapiens phosphorylase kinase, alpha 1 (muscle) (PHKA1), mRNA   |

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| NM_000926 | Homo sapiens progesterone receptor (PGR), mRNA  |
| NM_002633 | Homo sapiens phosphoglucomutase 1 (PGM1), mRNA  |
| NM_000291 | Homo sapiens phosphoglycerate kinase 1 (PGK1), mRNA   |
| NM_002632 | Homo sapiens placental growth factor, vascular endothelial growth factor-related protein (PGF), mRNA        |
| NM_002631 | Homo sapiens phosphogluconate dehydrogenase (PGD), mRNA   |
| NM_002630 | Homo sapiens progastricsin (pepsinogen C) (PGC), mRNA   |
| NM_000290 | Homo sapiens phosphoglycerate mutase 2 (muscle) (PGAM2), mRNA   |
| NM_002629 | Homo sapiens phosphoglycerate mutase 1 (brain) (PGAM1), mRNA  |
| NM_000289 | Homo sapiens phosphofructokinase, muscle (PFKM), mRNA   |
| NM_002626 | Homo sapiens phosphofructokinase, liver (PFKL), mRNA  |
| NM_002625 | Homo sapiens 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1 (PFKFB1), mRNA                           |
| NM_002621 | Homo sapiens properdin P factor, complement (PFC), mRNA   |
| NM_002620 | Homo sapiens platelet factor 4 variant 1 (PF4V1), mRNA  |
| NM_002619 | Homo sapiens platelet factor 4 (PF4), mRNA  |
| NM_000288 | Homo sapiens peroxisomal biogenesis factor 7 (PEX7), mRNA   |
| NM_000287 | Homo sapiens peroxisomal biogenesis factor 6 (PEX6), mRNA   |
| NM_003630 | Homo sapiens peroxisomal biogenesis factor 3 (PEX3), mRNA   |
| NM_000466 | Homo sapiens peroxisome biogenesis factor 1 (PEX1), mRNA  |
| NM_002618 | Homo sapiens peroxisome biogenesis factor 13 (PEX13), mRNA  |
| NM_000442 | Homo sapiens platelet/endothelial cell adhesion molecule (CD31 antigen) (PECAM1), mRNA                      |
| NM_002614 | Homo sapiens PDZ domain containing 1 (PDZK1), mRNA  |
| NM_003477 | Homo sapiens Pyruvate dehydrogenase complex, lipoyl-containing component X; E3-binding protein (PDX1), mRNA |
| NM_002613 | Homo sapiens 3-phosphoinositide dependent protein kinase-1 (PDPK1), mRNA                                    |
| NM_002612 | Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 4 (PDK4), mRNA  |
| NM_000925 | Homo sapiens pyruvate dehydrogenase (lipoamide) beta (PDHB), mRNA   |
| NM_000284 | Homo sapiens pyruvate dehydrogenase (lipoamide) alpha 1 (PDHA1), mRNA                                       |
| NM_000924 | Homo sapiens phosphodiesterase 1B, calmodulin-dependent (PDE1B), mRNA                                       |
| NM_002606 | Homo sapiens phosphodiesterase 9A (PDE9A), mRNA   |
| NM_002602 | Homo sapiens phosphodiesterase 6G, cGMP-specific, rod, gamma (PDE6G), mRNA                                  |
| NM_002601 | Homo sapiens phosphodiesterase 6D, cGMP-specific, rod, delta (PDE6D), mRNA                                  |
| NM_000921 | Homo sapiens phosphodiesterase 3A, cGMP-inhibited (PDE3A), mRNA   |
| NM_002598 | Homo sapiens programmed cell death 2 (PDCD2), mRNA  |
| NM_002594 | Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2), mRNA                                    |
| NM_002592 | Homo sapiens proliferating cell nuclear antigen (PCNA), mRNA  |
| NM_002591 | Homo sapiens phosphoenolpyruvate carboxykinase 1 (soluble) (PCK1), mRNA                                     |
| NM_002586 | Homo sapiens pre-B-cell leukemia transcription factor 2 (PBX2), mRNA  |
| NM_002585 | Homo sapiens pre-B-cell leukemia transcription factor 1 (PBX1), mRNA  |
| NM_002583 | Homo sapiens PRKC, apoptosis, WT1, regulator (PAWR), mRNA   |
| NM_002582 | Homo sapiens poly(A)-specific ribonuclease (deadenylation nuclease) (PARN), mRNA                            |
| NM_003631 | Homo sapiens poly (ADP-ribose) glycohydrolase (PARG), mRNA  |
| NM_002580 | Homo sapiens pancreatitis-associated protein (PAP), mRNA  |
| NM_000919 | Homo sapiens peptidylglycine alpha-amidating monooxygenase (PAM), mRNA                                      |
| NM_002578 | Homo sapiens p21 (CDKN1A)-activated kinase 3 (PAK3), mRNA   |
| NM_002574 | Homo sapiens peroxiredoxin 1 (PRDX1), mRNA  |
| NM_002573 | Homo sapiens platelet-activating factor acetylhydrolase, isoform 1b, gamma                                  |

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|           | subunit (29kD) (PAFAH1B3), mRNA  |
| NM_002572 | Homo sapiens platelet-activating factor acetylhydrolase, isoform Ib, beta subunit (30kD) (PAFAH1B2), mRNA  |
| NM_002571 | Homo sapiens progestagen-associated endometrial protein (placental protein 14, pregnancy-associated endometrial alpha-2-globulin, alpha uterine protein) (PAEP), mRNA                    |
| NM_002569 | Homo sapiens paired basic amino acid cleaving enzyme (furin, membrane associated receptor protein) (PACE), mRNA  |
| NM_002570 | Homo sapiens paired basic amino acid cleaving system 4 (PACE4), mRNA   |
| NM_003900 | Homo sapiens sequestosome 1 (SQSTM1), mRNA   |
| NM_000918 | Homo sapiens procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), beta polypeptide (protein disulfide isomerase; thyroid hormone binding protein p55) (P4HB), mRNA |
| NM_000917 | Homo sapiens procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide I (P4HA1), mRNA  |
| NM_002565 | Homo sapiens pyrimidineric receptor P2Y, G-protein coupled, 4 (P2RY4), mRNA  |
| NM_002564 | Homo sapiens purineric receptor P2Y, G-protein coupled, 2 (P2RY2), mRNA  |
| NM_002566 | Homo sapiens purineric receptor P2Y, G-protein coupled, 11 (P2RY11), mRNA  |
| NM_002562 | Homo sapiens purineric receptor P2X, ligand-gated ion channel, 7 (P2RX7), mRNA   |
| NM_002561 | Homo sapiens purineric receptor P2X, ligand-gated ion channel, 5 (P2RX5), mRNA   |
| NM_002560 | Homo sapiens purineric receptor P2X, ligand-gated ion channel, 4 (P2RX4), mRNA   |
| NM_002559 | Homo sapiens purineric receptor P2X, ligand-gated ion channel, 3 (P2RX3), mRNA   |
| NM_002556 | Homo sapiens oxysterol binding protein (OSBP), mRNA  |
| NM_000608 | Homo sapiens orosomucoid 2 (ORM2), mRNA  |
| NM_003696 | Homo sapiens olfactory receptor, family 6, subfamily A, member 1 (OR6A1), mRNA   |
| NM_002550 | Homo sapiens olfactory receptor, family 3, subfamily A, member 1 (OR3A1), mRNA   |
| NM_002548 | Homo sapiens olfactory receptor, family 1, subfamily D, member 2 (OR1D2), mRNA   |
| NM_000914 | Homo sapiens opioid receptor, mu 1 (OPRM1), mRNA   |
| NM_000912 | Homo sapiens opioid receptor, kappa 1 (OPRK1), mRNA  |
| NM_000911 | Homo sapiens opioid receptor, delta 1 (OPRD1), mRNA  |
| NM_002544 | Homo sapiens oligodendrocyte myelin glycoprotein (OMG), mRNA   |
| NM_002543 | Homo sapiens oxidised low density lipoprotein (lectin-like) receptor 1 (OLR1), mRNA  |
| NM_003485 | Homo sapiens G protein-coupled receptor 68 (GPR68), mRNA   |
| NM_002540 | Homo sapiens outer dense fibre of sperm tails 2 (ODF2), mRNA   |
| NM_002533 | Homo sapiens nuclear VCP-like (NVL), mRNA  |
| NM_002531 | Homo sapiens neurotensin receptor 1 (high affinity) (NTSR1), mRNA  |
| NM_002530 | Homo sapiens neurotrophic tyrosine kinase, receptor, type 3 (NTRK3), mRNA  |
| NM_002526 | Homo sapiens 5' nucleotidase (CD73) (NT5), mRNA  |
| NM_003580 | Homo sapiens neutral sphingomyelinase (N-SMase) activation associated factor (NSMAF), mRNA   |
| NM_003633 | Homo sapiens ectodermal-neural cortex (with BTB-like domain) (ENC1), mRNA  |

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| NM_003872 | Homo sapiens neuropilin 2 (NRP2), mRNA  |
| NM_003873 | Homo sapiens neuropilin 1 (NRPI), mRNA  |
| NM_003489 | Homo sapiens nuclear receptor interacting protein 1 (NRIP1), mRNA   |
| NM_002525 | Homo sapiens nardilysin (N-arginine dibasic convertase) (NRD1), mRNA  |
| NM_000905 | Homo sapiens neuropeptide Y (NPY), mRNA   |
| NM_000910 | Homo sapiens neuropeptide Y receptor Y2 (NPY2R), mRNA   |
| NM_000909 | Homo sapiens neuropeptide Y receptor Y1 (NPY1R), mRNA   |
| NM_002522 | Homo sapiens neuronal pentraxin I (NPTX1), mRNA   |
| NM_000908 | Homo sapiens natriuretic peptide receptor C/guanylate cyclase C (atrionatriuretic peptide receptor C) (NPR3), mRNA          |
| NM_000906 | Homo sapiens natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide receptor A) (NPR1), mRNA          |
| NM_002521 | Homo sapiens natriuretic peptide precursor B (NPPB), mRNA   |
| NM_002519 | Homo sapiens nuclear protein, ataxia-telangiectasia locus (NPAT), mRNA  |
| NM_002518 | Homo sapiens neuronal PAS domain protein 2 (NPAS2), mRNA  |
| NM_002517 | Homo sapiens neuronal PAS domain protein 1 (NPAS1), mRNA  |
| NM_002514 | Homo sapiens nephroblastoma overexpressed gene (NOV), mRNA  |
| NM_003787 | Homo sapiens nucleolar protein 4 (NOL4), mRNA   |
| NM_003946 | Homo sapiens nucleolar protein 3 (apoptosis repressor with CARD domain) (NOL3), mRNA  |
| NM_003551 | Homo sapiens non-metastatic cells 5, protein expressed in (nucleoside-diphosphate kinase) (NME5), mRNA                      |
| NM_002513 | Homo sapiens non-metastatic cells 3, protein expressed in (NME3), mRNA  |
| NM_002512 | Homo sapiens non-metastatic cells 2, protein (NM23B) expressed in (NME2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_002511 | Homo sapiens neuromedin B receptor (NMBR), mRNA   |
| NM_002510 | Homo sapiens glycoprotein (transmembrane) nmb (GPNMB), mRNA   |
| NM_003954 | Homo sapiens mitogen-activated protein kinase kinase kinase 14 (MAP3K14), mRNA  |
| NM_002508 | Homo sapiens nidogen (enactin) (NID), mRNA  |
| NM_002507 | Homo sapiens nerve growth factor receptor (TNFR superfamily, member 16) (NGFR), mRNA  |
| NM_002506 | Homo sapiens nerve growth factor, beta polypeptide (NGFB), mRNA   |
| NM_002503 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, beta (NFKBIB), mRNA              |
| NM_002502 | Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2), mRNA                  |
| NM_002501 | Homo sapiens nuclear factor I/X (CCAAT-binding transcription factor) (NFIX), mRNA   |
| NM_002500 | Homo sapiens neurogenic differentiation 1 (NEUROD1), mRNA   |
| NM_002497 | Homo sapiens NIMA (never in mitosis gene a)-related kinase 2 (NEK2), mRNA   |
| NM_002496 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase) (NDUFS8), mRNA               |
| NM_002495 | Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 4 (18kD) (NADH-coenzyme Q reductase) (NDUFS4), mRNA               |
| NM_002494 | Homo sapiens NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 1 (6kD, KFYI) (NDUFC1), mRNA                            |
| NM_002490 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (14kD, B14) (NDUFA6), mRNA                               |
| NM_002488 | Homo sapiens NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2 (8kD, B8) (NDUFA2), mRNA                                 |
| NM_003635 | Homo sapiens N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2  |

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|           | (NDST2), mRNA  |
| NM_001543 | Homo sapiens N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1 (NDST1), mRNA   |
| NM_003581 | Homo sapiens NCK adaptor protein 2 (NCK2), mRNA  |
| NM_002486 | Homo sapiens nuclear cap binding protein subunit 1, 80kD (NCBP1), mRNA   |
| NM_002483 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 6 (non-specific cross reacting antigen) (CEACAM6), mRNA |
| NM_000662 | Homo sapiens N-acetyltransferase 1 (arylamine N-acetyltransferase) (NAT1), mRNA  |
| NM_000263 | Homo sapiens N-acetylglucosaminidase, alpha- (Sanfilippo disease IIIB) (NAGLU), mRNA   |
| NM_003871 | Homo sapiens myelin transcription factor 2 (MYT2), mRNA  |
| NM_003803 | Homo sapiens myomesin 1 (skelemin) (185kD) (MYOM1), mRNA   |
| NM_002479 | Homo sapiens myogenin (myogenic factor 4) (MYOG), mRNA   |
| NM_002472 | Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA  |
| NM_002469 | Homo sapiens myogenic factor 6 (herculin) (MYF6), mRNA   |
| NM_002468 | Homo sapiens myeloid differentiation primary response gene (88) (MYD88), mRNA  |
| NM_002460 | Homo sapiens interferon regulatory factor 4 (IRF4), mRNA   |
| NM_002457 | Homo sapiens mucin 2, intestinal/tracheal (MUC2), mRNA   |
| NM_002456 | Homo sapiens mucin 1, transmembrane (MUC1), mRNA   |
| NM_002455 | Homo sapiens metaxin 1 (MTX1), mRNA  |
| NM_002453 | Homo sapiens mitochondrial translational initiation factor 2 (MTIF2), nuclear gene encoding mitochondrial protein, mRNA      |
| NM_002452 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 1 (NUDT1), mRNA                                       |
| NM_002450 | Homo sapiens metallothionein 1L (MT1L), mRNA   |
| NM_002447 | Homo sapiens macrophage stimulating 1 receptor (c-met-related tyrosine kinase) (MST1R), mRNA                                 |
| NM_002446 | Homo sapiens mitogen-activated protein kinase kinase kinase 10 (MAP3K10), mRNA   |
| NM_002445 | Homo sapiens macrophage scavenger receptor 1 (MSR1), mRNA  |
| NM_002444 | Homo sapiens moesin (MSN), mRNA  |
| NM_003879 | Homo sapiens CASP8 and FADD-like apoptosis regulator (CFLAR), mRNA   |
| NM_000530 | Homo sapiens myelin protein zero (Charcot-Marie-Tooth neuropathy 1B) (MPZ), mRNA   |
| NM_002437 | Homo sapiens MpV17 transgene, murine homolog, glomerulosclerosis (MPV17), mRNA   |
| NM_001932 | Homo sapiens membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) (MPP3), mRNA                                   |
| NM_002435 | Homo sapiens mannose phosphate isomerase (MPI), mRNA   |
| NM_002434 | Homo sapiens N-methylpurine-DNA glycosylase (MPG), mRNA  |
| NM_003829 | Homo sapiens multiple PDZ domain protein (MPDZ), mRNA  |
| NM_003824 | Homo sapiens Fas (TNFRSF6)-associated via death domain (FADD), mRNA  |
| NM_002432 | Homo sapiens myeloid cell nuclear differentiation antigen (MNDA), mRNA   |
| NM_002431 | Homo sapiens menage a trois 1 (CAK assembly factor) (MNAT1), mRNA  |
| NM_002430 | Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA  |
| NM_000901 | Homo sapiens nuclear receptor subfamily 3, group C, member 2 (NR3C2), mRNA   |
| NM_003482 | Homo sapiens myeloid/lymphoid or mixed-lineage leukemia 2 (MLL2), mRNA   |



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| NM_002419 | Homo sapiens mitogen-activated protein kinase kinase kinase 11 (MAP3K11), mRNA                                  |
| NM_002417 | Homo sapiens antigen identified by monoclonal antibody Ki-67 (MKI67), mRNA                                      |
| NM_002416 | Homo sapiens monokine induced by gamma interferon (MIG), mRNA   |
| NM_002415 | Homo sapiens macrophage migration inhibitory factor (glycosylation-inhibiting factor) (MIF), mRNA               |
| NM_002413 | Homo sapiens microsomal glutathione S-transferase 2 (MGST2), mRNA   |
| NM_000900 | Homo sapiens matrix Gla protein (MGP), mRNA   |
| NM_002412 | Homo sapiens O-6-methylguanine-DNA methyltransferase (MGMT), mRNA   |
| NM_002407 | Homo sapiens mammaglobin 2 (MGB2), mRNA   |
| NM_002411 | Homo sapiens mammaglobin 1 (MGB1), mRNA   |
| NM_002397 | Homo sapiens MADS box transcription enhancer factor 2, polypeptide C (myocyte enhancer factor 2C) (MEF2C), mRNA |
| NM_002391 | Homo sapiens midkine (neurite growth-promoting factor 2) (MDK), mRNA  |
| NM_002387 | Homo sapiens mutated in colorectal cancers (MCC), mRNA  |
| NM_000529 | Homo sapiens melanocortin 2 receptor (adrenocorticotrophic hormone) (MC2R), mRNA                                |
| NM_002386 | Homo sapiens melanocortin 1 receptor (alpha melanocyte stimulating hormone receptor) (MC1R), mRNA               |
| NM_002385 | Homo sapiens myelin basic protein (MBP), mRNA   |
| NM_002382 | Homo sapiens MAX protein (MAX), mRNA  |
| NM_002378 | Homo sapiens megakaryocyte-associated tyrosine kinase (MATK), mRNA  |
| NM_002376 | Homo sapiens MAP/microtubule affinity-regulating kinase 3 (MARK3), mRNA   |
| NM_000898 | Homo sapiens monoamine oxidase B (MAOB), nuclear gene encoding mitochondrial protein, mRNA                      |
| NM_003480 | Homo sapiens Microfibril-associated glycoprotein-2 (MAGP2), mRNA  |
| NM_002367 | Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA   |
| NM_002365 | Homo sapiens melanoma antigen, family B, 3 (MAGEB3), mRNA   |
| NM_002364 | Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA   |
| NM_002363 | Homo sapiens melanoma antigen, family B, 1 (MAGEB1), mRNA   |
| NM_002362 | Homo sapiens melanoma antigen, family A, 4 (MAGEA4), mRNA   |
| NM_003682 | Homo sapiens MAP-kinase activating death domain (MADD), mRNA  |
| NM_002357 | Homo sapiens MAX dimerization protein (MAD), mRNA   |
| NM_002350 | Homo sapiens v-yes-1 Yamaguchi sarcoma viral related oncogene homolog (LYN), mRNA                               |
| NM_002349 | Homo sapiens lymphocyte antigen 75 (LY75), mRNA   |
| NM_002347 | Homo sapiens lymphocyte antigen 6 complex, locus H (LY6H), mRNA   |
| NM_002346 | Homo sapiens lymphocyte antigen 6 complex, locus E (LY6E), mRNA   |
| NM_002345 | Homo sapiens lumican (LUM), mRNA  |
| NM_002344 | Homo sapiens leukocyte tyrosine kinase (LTK), mRNA  |
| NM_002343 | Homo sapiens lactotransferrin (LTF), mRNA   |
| NM_000897 | Homo sapiens leukotriene C4 synthase (LTC4S), mRNA  |
| NM_003573 | Homo sapiens latent transforming growth factor beta binding protein 4 (LTBP4), mRNA                             |
| NM_000752 | Homo sapiens leukotriene b4 receptor (chemokine receptor-like 1) (LTB4R), mRNA                                  |
| NM_000895 | Homo sapiens leukotriene A4 hydrolase (LTA4H), mRNA   |
| NM_002340 | Homo sapiens lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) (LSS), mRNA                             |
| NM_002338 | Homo sapiens limbic system-associated membrane protein (LSAMP), mRNA  |
| NM_002337 | Homo sapiens low density lipoprotein-related protein-associated protein 1                                       |

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|           | (alpha-2-macroglobulin receptor-associated protein 1) (LRPAP1), mRNA   |
| NM_002336 | Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6), mRNA   |
| NM_002319 | Homo sapiens leucine-rich neuronal protein (LRN), mRNA   |
| NM_002317 | Homo sapiens lysyl oxidase (LOX), mRNA   |
| NM_002316 | Homo sapiens LIM homeobox transcription factor 1, beta (LMX1B), mRNA   |
| NM_002315 | Homo sapiens LIM domain only 1 (rhombotin 1) (LMO1), mRNA  |
| NM_002312 | Homo sapiens ligase IV, DNA, ATP-dependent (LIG4), mRNA  |
| NM_002306 | Homo sapiens lectin, galactoside-binding, soluble, 3 (galectin 3) (LGALS3), mRNA                                     |
| NM_002303 | Homo sapiens leptin receptor (LEPR), mRNA  |
| NM_002302 | Homo sapiens leukocyte cell-derived chemotaxin 2 (LECT2), mRNA   |
| NM_001290 | Homo sapiens LIM domain binding 2 (LDB2), mRNA   |
| NM_003893 | Homo sapiens LIM domain binding 1 (LDB1), mRNA   |
| NM_002299 | Homo sapiens lactase (LCT), mRNA   |
| NM_002297 | Homo sapiens lipocalin 1 (protein migrating faster than albumin, tear prealbumin) (LCN1), mRNA                       |
| NM_002296 | Homo sapiens lamin B receptor (LBR), mRNA  |
| NM_002291 | Homo sapiens laminin, beta 1 (LAMBI), mRNA   |
| NM_002289 | Homo sapiens lactalbumin, alpha- (LALBA), mRNA   |
| NM_002273 | Homo sapiens keratin 8 (KRT8), mRNA  |
| NM_002276 | Homo sapiens keratin 19 (KRT19), mRNA  |
| NM_002275 | Homo sapiens keratin 15 (KRT15), mRNA  |
| NM_002274 | Homo sapiens keratin 13 (KRT13), mRNA  |
| NM_002265 | Homo sapiens karyopherin (importin) beta 1 (KPNB1), mRNA   |
| NM_002267 | Homo sapiens karyopherin alpha 3 (importin alpha 4) (KPNA3), mRNA  |
| NM_002266 | Homo sapiens karyopherin alpha 2 (RAG cohort 1, importin alpha 1) (KPNA2), mRNA                                      |
| NM_000893 | Homo sapiens kininogen (KNG), mRNA   |
| NM_003679 | Homo sapiens kynurenine 3-monooxygenase (kynurenine 3-hydroxylase) (KMO), mRNA                                       |
| NM_002258 | Homo sapiens killer cell lectin-like receptor subfamily B, member 1 (KLRB1), mRNA                                    |
| NM_002257 | Homo sapiens kallikrein 1, renal/pancreas/salivary (KLK1), mRNA  |
| NM_002256 | Homo sapiens KiSS-1 metastasis-suppressor (KISS1), mRNA  |
| NM_002255 | Homo sapiens killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 4 (KIR2DL4), mRNA         |
| NM_002254 | Homo sapiens kinesin family member 3C (KIF3C), mRNA  |
| NM_003958 | Homo sapiens ring finger protein (C3HC4 type) 8 (RNF8), mRNA   |
| NM_003685 | Homo sapiens KH-type splicing regulatory protein (FUSE binding protein 2) (KHSRP), mRNA                              |
| NM_002252 | Homo sapiens potassium voltage-gated channel, delayed-rectifier, subfamily S, member 3 (KCNS3), mRNA                 |
| NM_002250 | Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4 (KCNN4), mRNA |
| NM_002249 | Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3 (KCNN3), mRNA |
| NM_002247 | Homo sapiens potassium large conductance calcium-activated channel, subfamily M, alpha member 1 (KCNMA1), mRNA       |
| NM_002244 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, inhibitor 1 (KCNJN1), mRNA                          |
| NM_002240 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 6 (KCNJ6), mRNA                              |

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| NM_002239 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 3 (KCNJ3), mRNA  |
| NM_000891 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 2 (KCNJ2), mRNA  |
| NM_002241 | Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 10 (KCNJ10), mRNA  |
| NM_002238 | Homo sapiens potassium voltage-gated channel, subfamily H (eag-related), member 1 (KCNH1), mRNA                                  |
| NM_002237 | Homo sapiens potassium voltage-gated channel, subfamily G, member 1 (KCNG1), mRNA  |
| NM_002236 | Homo sapiens potassium voltage-gated channel, subfamily F, member 1 (KCNF1), mRNA  |
| NM_003636 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, beta member 2 (KCNA2), mRNA                              |
| NM_003471 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, beta member 1 (KCNA1), mRNA                              |
| NM_002235 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 6 (KCNA6), mRNA                                   |
| NM_002234 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 5 (KCNA5), mRNA                                   |
| NM_002233 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 4 (KCNA4), mRNA                                   |
| NM_002232 | Homo sapiens potassium voltage-gated channel, shaker-related subfamily, member 3 (KCNA3), mRNA                                   |
| NM_002229 | Homo sapiens jun B proto-oncogene (JUNB), mRNA   |
| NM_003666 | Homo sapiens basic leucine zipper nuclear factor 1 (JEM-1) (BLZF1), mRNA   |
| NM_002227 | Homo sapiens Janus kinase 1 (a protein tyrosine kinase) (JAK1), mRNA   |
| NM_003024 | Homo sapiens intersectin 1 (SH3 domain protein) (ITSN1), mRNA  |
| NM_002224 | Homo sapiens inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3), mRNA   |
| NM_002223 | Homo sapiens inositol 1,4,5-trisphosphate receptor, type 2 (ITPR2), mRNA   |
| NM_002221 | Homo sapiens inositol 1,4,5-trisphosphate 3-kinase B (ITPKB), mRNA   |
| NM_002220 | Homo sapiens inositol 1,4,5-trisphosphate 3-kinase A (ITPKA), mRNA   |
| NM_002219 | Homo sapiens integral membrane protein 1 (ITM1), mRNA  |
| NM_002218 | Homo sapiens inter-alpha (globulin) inhibitor H4 (plasma Kallikrein-sensitive glycoprotein) (ITIH4), mRNA                        |
| NM_002216 | Homo sapiens inter-alpha (globulin) inhibitor, H2 polypeptide (ITIH2), mRNA  |
| NM_002215 | Homo sapiens inter-alpha (globulin) inhibitor, H1 polypeptide (ITIH1), mRNA  |
| NM_000889 | Homo sapiens integrin, beta 7 (ITGB7), mRNA  |
| NM_002212 | Homo sapiens integrin beta 4 binding protein (ITGB4BP), mRNA   |
| NM_000213 | Homo sapiens integrin, beta 4 (ITGB4), mRNA  |
| NM_002211 | Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), mRNA          |
| NM_002210 | Homo sapiens integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51) (ITGAV), mRNA                             |
| NM_002209 | Homo sapiens integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL), mRNA |
| NM_002206 | Homo sapiens integrin, alpha 7 (ITGA7), mRNA   |
| NM_002205 | Homo sapiens integrin, alpha 5 (fibronectin receptor, alpha polypeptide) (ITGA5), mRNA   |
| NM_003749 | Homo sapiens insulin receptor substrate 2 (IRS2), mRNA   |
| NM_001571 | Homo sapiens interferon regulatory factor 3 (IRF3), mRNA   |
| NM_002198 | Homo sapiens interferon regulatory factor 1 (IRF1), mRNA   |

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| NM_002196 | Homo sapiens insulinoma-associated 1 (INSM1), mRNA   |
| NM_002195 | Homo sapiens insulin-like 4 (placenta) (INSL4), mRNA   |
| NM_001565 | Homo sapiens small inducible cytokine subfamily B (Cys-X-Cys), member 10 (SCYB10), mRNA  |
| NM_002192 | Homo sapiens inhibin, beta A (activin A, activin AB alpha polypeptide) (INHBA), mRNA   |
| NM_001564 | Homo sapiens inhibitor of growth family, member 1-like (ING1L), mRNA   |
| NM_003669 | Homo sapiens inactivation escape 1 (INE1), mRNA  |
| NM_000884 | Homo sapiens IMP (inosine monophosphate) dehydrogenase 2 (IMPDH2), mRNA  |
| NM_000883 | Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA  |
| NM_001557 | Homo sapiens interleukin 8 receptor, beta (IL8RB), mRNA  |
| NM_000634 | Homo sapiens interleukin 8 receptor, alpha (IL8RA), mRNA   |
| NM_002185 | Homo sapiens interleukin 7 receptor (IL7R), mRNA   |
| NM_000880 | Homo sapiens interleukin 7 (IL7), mRNA   |
| NM_002184 | Homo sapiens interleukin 6 signal transducer (gp130, oncostatin M receptor) (IL6ST), mRNA  |
| NM_000565 | Homo sapiens interleukin 6 receptor (IL6R), mRNA   |
| NM_000879 | Homo sapiens interleukin 5 (colony-stimulating factor, eosinophil) (IL5), mRNA   |
| NM_000589 | Homo sapiens interleukin 4 (IL4), mRNA   |
| NM_000588 | Homo sapiens interleukin 3 (colony-stimulating factor, multiple) (IL3), mRNA   |
| NM_000878 | Homo sapiens interleukin 2 receptor, beta (IL2RB), mRNA  |
| NM_003854 | Homo sapiens interleukin 1 receptor-like 2 (IL1RL2), mRNA  |
| NM_002182 | Homo sapiens interleukin 1 receptor accessory protein (IL1RAP), mRNA   |
| NM_000877 | Homo sapiens interleukin 1 receptor, type I (IL1R1), mRNA  |
| NM_003853 | Homo sapiens interleukin 18 receptor accessory protein (IL18RAP), mRNA   |
| NM_003855 | Homo sapiens interleukin 18 receptor 1 (IL18R1), mRNA  |
| NM_001562 | Homo sapiens interleukin 18 (interferon-gamma-inducing factor) (IL18), mRNA  |
| NM_002190 | Homo sapiens interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8) (IL17), mRNA                                       |
| NM_002189 | Homo sapiens interleukin 15 receptor, alpha (IL15RA), mRNA   |
| NM_002188 | Homo sapiens interleukin 13 (IL13), mRNA   |
| NM_001559 | Homo sapiens interleukin 12 receptor, beta 2 (IL12RB2), mRNA   |
| NM_002187 | Homo sapiens interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B), mRNA |
| NM_000882 | Homo sapiens interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35) (IL12A), mRNA |
| NM_000628 | Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA  |
| NM_001558 | Homo sapiens interleukin 10 receptor, alpha (IL10RA), mRNA   |
| NM_003639 | Homo sapiens inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma (IKBKG), mRNA                               |
| NM_003640 | Homo sapiens inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein (IKBKAP), mRNA         |
| NM_001542 | Homo sapiens immunoglobulin superfamily, member 3 (IGSF3), mRNA  |
| NM_001555 | Homo sapiens immunoglobulin superfamily, member 1 (IGSF1), mRNA  |
| NM_002180 | Homo sapiens immunoglobulin mu binding protein 2 (IGHMBP2), mRNA   |
| NM_001553 | Homo sapiens insulin-like growth factor binding protein 7 (IGFBP7), mRNA   |
| NM_000598 | Homo sapiens insulin-like growth factor binding protein 3 (IGFBP3), mRNA   |
| NM_000596 | Homo sapiens insulin-like growth factor binding protein 1 (IGFBP1), mRNA   |
| NM_001554 | Homo sapiens cysteine-rich, angiogenic inducer, 61 (CYR61), mRNA   |
| NM_000876 | Homo sapiens insulin-like growth factor 2 receptor (IGF2R), mRNA   |

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| NM_001550 | Homo sapiens interferon-related developmental regulator 1 (IFRD1), mRNA  |
| NM_002177 | Homo sapiens interferon, omega 1 (IFNW1), mRNA   |
| NM_002176 | Homo sapiens interferon, beta 1, fibroblast (IFNB1), mRNA  |
| NM_000874 | Homo sapiens interferon (alpha, beta and omega) receptor 2 (IFNAR2), mRNA  |
| NM_002170 | Homo sapiens interferon, alpha 8 (IFNA8), mRNA   |
| NM_002169 | Homo sapiens interferon, alpha 5 (IFNA5), mRNA   |
| NM_002175 | Homo sapiens interferon, alpha 21 (IFNA21), mRNA   |
| NM_002173 | Homo sapiens interferon, alpha 16 (IFNA16), mRNA   |
| NM_002172 | Homo sapiens interferon, alpha 14 (IFNA14), mRNA   |
| NM_002171 | Homo sapiens interferon, alpha 10 (IFNA10), mRNA   |
| NM_001549 | Homo sapiens interferon-induced protein with tetratricopeptide repeats 4 (IFIT4), mRNA                                   |
| NM_001548 | Homo sapiens interferon-induced protein with tetratricopeptide repeats 1 (IFIT1), mRNA                                   |
| NM_003641 | Homo sapiens interferon induced transmembrane protein 1 (9-27) (IFITM1), mRNA  |
| NM_000204 | Homo sapiens I factor (complement) (IF), mRNA  |
| NM_002168 | Homo sapiens isocitrate dehydrogenase 2 (NADP+), mitochondrial (IDH2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001546 | Homo sapiens inhibitor of DNA binding 4, dominant negative helix-loop-helix protein (ID4), mRNA                          |
| NM_002166 | Homo sapiens inhibitor of DNA binding 2, dominant negative helix-loop-helix protein (ID2), mRNA                          |
| NM_002165 | Homo sapiens inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1), mRNA                          |
| NM_002160 | Homo sapiens hexabrachion (tenascin C, cytactin) (HXB), mRNA   |
| NM_000871 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 6 (HTR6), mRNA   |
| NM_000869 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 3A (HTR3A), mRNA   |
| NM_000868 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 2C (HTR2C), mRNA   |
| NM_000867 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 2B (HTR2B), mRNA   |
| NM_000865 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA   |
| NM_000864 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1D (HTR1D), mRNA   |
| NM_000863 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B), mRNA   |
| NM_000524 | Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1A (HTR1A), mRNA   |
| NM_002159 | Homo sapiens histatin 1 (HTN1), mRNA   |
| NM_002158 | Homo sapiens human T-cell leukemia virus enhancer factor (HTLF), mRNA  |
| NM_001541 | Homo sapiens heat shock 27kD protein 2 (HSPB2), mRNA   |
| NM_002155 | Homo sapiens heat shock 70kD protein 6 (HSP70B') (HSPA6), mRNA   |
| NM_001539 | Homo sapiens heat shock protein, DNAJ-like 2 (HSJ2), mRNA  |
| NM_000198 | Homo sapiens hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 2 (HSD3B2), mRNA                 |
| NM_000862 | Homo sapiens hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1 (HSD3B1), mRNA                 |
| NM_000414 | Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA  |
| NM_002153 | Homo sapiens hydroxysteroid (17-beta) dehydrogenase 2 (HSD17B2), mRNA  |
| NM_000413 | Homo sapiens hydroxysteroid (17-beta) dehydrogenase 1 (HSD17B1), mRNA  |
| NM_000196 | Homo sapiens hydroxysteroid (11-beta) dehydrogenase 2 (HSD11B2), mRNA  |
| NM_002151 | Homo sapiens hepsin (transmembrane protease, serine 1) (HPN), mRNA   |
| NM_000860 | Homo sapiens hydroxyprostaglandin dehydrogenase 15-(NAD) (HPGD), mRNA  |
| NM_002150 | Homo sapiens 4-hydroxyphenylpyruvate dioxygenase (HPD), mRNA   |
| NM_002143 | Homo sapiens hippocalcin (HPCA), mRNA  |
| NM_002148 | Homo sapiens homeo box D10 (HOXD10), mRNA  |

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| NM_002147 | Homo sapiens homeo box B5 (HOXB5), mRNA  |
| NM_002146 | Homo sapiens homeo box B3 (HOXB3), mRNA  |
| NM_002145 | Homo sapiens homeo box B2 (HOXB2), mRNA  |
| NM_002144 | Homo sapiens homeo box B1 (HOXB1), mRNA  |
| NM_002142 | Homo sapiens homeo box A9 (HOXA9), mRNA  |
| NM_002141 | Homo sapiens homeo box A4 (HOXA4), mRNA  |
| NM_000522 | Homo sapiens homeo box A13 (HOXA13), mRNA  |
| NM_002139 | Homo sapiens RNA binding motif protein, X chromosome (RBMX), mRNA  |
| NM_000457 | Homo sapiens hepatocyte nuclear factor 4, alpha (HNF4A), mRNA  |
| NM_002135 | Homo sapiens nuclear receptor subfamily 4, group A, member 1 (NR4A1), mRNA   |
| NM_002133 | Homo sapiens heme oxygenase (decycling) 1 (HMOX1), mRNA  |
| NM_002131 | Homo sapiens high-mobility group (nonhistone chromosomal) protein isoforms I and Y (HMG1Y), mRNA   |
| NM_002130 | Homo sapiens 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 (soluble) (HMGCS1), mRNA   |
| NM_002128 | Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1), mRNA   |
| NM_000190 | Homo sapiens hydroxymethylbilane synthase (HMBS), mRNA   |
| NM_002126 | Homo sapiens hepatic leukemia factor (HLF), mRNA   |
| NM_001531 | Homo sapiens major histocompatibility complex, class I-like sequence (HLALS), mRNA   |
| NM_002127 | Homo sapiens HLA-G histocompatibility antigen, class I, G (HLA-G), mRNA  |
| NM_002123 | Homo sapiens major histocompatibility complex, class II, DQ beta 1 (HLA-DQB1), mRNA  |
| NM_001530 | Homo sapiens hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) (HIF1A), mRNA   |
| NM_001528 | Homo sapiens HGF activator (HGFAC), mRNA   |
| NM_000187 | Homo sapiens homogentisate 1,2-dioxygenase (homogentisate oxidase) (HGD), mRNA   |
| NM_000410 | Homo sapiens hemochromatosis (HFE), mRNA   |
| NM_000186 | Homo sapiens H factor 1 (complement) (HF1), mRNA   |
| NM_003865 | Homo sapiens homeo box (expressed in ES cells) 1 (HESX1), mRNA   |
| NM_002112 | Homo sapiens histidine decarboxylase (HDC), mRNA   |
| NM_002110 | Homo sapiens hemopoietic cell kinase (HCK), mRNA   |
| NM_003642 | Homo sapiens histone acetyltransferase 1 (HAT1), mRNA  |
| NM_001523 | Homo sapiens hyaluronan synthase 1 (HAS1), mRNA  |
| NM_000183 | Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB), mRNA  |
| NM_000182 | Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit (HADHA), mRNA |
| NM_003548 | Homo sapiens H4 histone, family 2 (H4F2), mRNA   |
| NM_003547 | Homo sapiens H4 histone family, member L (H4FL), mRNA  |
| NM_003544 | Homo sapiens H4 histone family, member I (H4FI), mRNA  |
| NM_003493 | Homo sapiens H3 histone family, member T (H3FT), mRNA  |
| NM_003537 | Homo sapiens H3 histone family, member L (H3FL), mRNA  |
| NM_003534 | Homo sapiens H3 histone family, member H (H3FH), mRNA  |
| NM_003532 | Homo sapiens H3 histone family, member D (H3FD), mRNA  |
| NM_003531 | Homo sapiens H3 histone family, member C (H3FC), mRNA  |
| NM_003530 | Homo sapiens H3 histone family, member B (H3FB), mRNA  |

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| NM_003529 | Homo sapiens H3 histone family, member A (H3FA), mRNA   |
| NM_002107 | Homo sapiens H3 histone, family 3A (H3F3A), mRNA  |
| NM_003528 | Homo sapiens H2B histone family, member Q (H2BFQ), mRNA   |
| NM_003526 | Homo sapiens H2B histone family, member L (H2BFL), mRNA   |
| NM_003525 | Homo sapiens H2B histone family, member K (H2BFK), mRNA   |
| NM_003524 | Homo sapiens H2B histone family, member J (H2BFJ), mRNA   |
| NM_003523 | Homo sapiens H2B histone family, member H (H2BFH), mRNA   |
| NM_003522 | Homo sapiens H2B histone family, member G (H2BFG), mRNA   |
| NM_003518 | Homo sapiens H2B histone family, member A (H2BFA), mRNA   |
| NM_002106 | Homo sapiens H2A histone family, member Z (H2AFZ), mRNA   |
| NM_003516 | Homo sapiens H2A histone family, member O (H2AFO), mRNA   |
| NM_003513 | Homo sapiens H2A histone family, member M (H2AFM), mRNA   |
| NM_003512 | Homo sapiens H2A histone family, member L (H2AFL), mRNA   |
| NM_003612 | Homo sapiens sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (semaphorin) 7A (SEMA7A), mRNA |
| NM_002104 | Homo sapiens granzyme K (serine protease, granzyme 3; tryptase II) (GZMK), mRNA                               |
| NM_002103 | Homo sapiens glycogen synthase 1 (muscle) (GYS1), mRNA  |
| NM_002102 | Homo sapiens glycophorin E (GYPE), mRNA   |
| NM_000181 | Homo sapiens glucuronidase, beta (GUSB), mRNA   |
| NM_000858 | Homo sapiens guanylate kinase 1 (GUK1), mRNA  |
| NM_001522 | Homo sapiens guanylate cyclase 2F, retinal (GUCY2F), mRNA   |
| NM_000180 | Homo sapiens guanylate cyclase 2D, membrane (retina-specific) (GUCY2D), mRNA                                  |
| NM_000857 | Homo sapiens guanylate cyclase 1, soluble, beta 3 (GUCY1B3), mRNA   |
| NM_000856 | Homo sapiens guanylate cyclase 1, soluble, alpha 3 (GUCY1A3), mRNA  |
| NM_000855 | Homo sapiens guanylate cyclase 1, soluble, alpha 2 (GUCY1A2), mRNA  |
| NM_000409 | Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A), mRNA   |
| NM_001517 | Homo sapiens general transcription factor IIH, polypeptide 4 (52kD subunit) (GTF2H4), mRNA                    |
| NM_002096 | Homo sapiens general transcription factor IIF, polypeptide 1 (74kD subunit) (GTF2F1), mRNA                    |
| NM_002095 | Homo sapiens general transcription factor IIE, polypeptide 2 (beta subunit, 34kD) (GTF2E2), mRNA              |
| NM_001513 | Homo sapiens glutathione transferase zeta 1 (maleylacetoacetate isomerase) (GSTZ1), mRNA                      |
| NM_000853 | Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA  |
| NM_000851 | Homo sapiens glutathione S-transferase M5 (GSTM5), mRNA   |
| NM_000850 | Homo sapiens glutathione S-transferase M4 (GSTM4), mRNA   |
| NM_000849 | Homo sapiens glutathione S-transferase M3 (brain) (GSTM3), mRNA   |
| NM_000848 | Homo sapiens glutathione S-transferase M2 (muscle) (GSTM2), mRNA  |
| NM_001512 | Homo sapiens glutathione S-transferase A4 (GSTA4), mRNA   |
| NM_000846 | Homo sapiens glutathione S-transferase A2 (GSTA2), mRNA   |
| NM_000178 | Homo sapiens glutathione synthetase (GSS), mRNA   |
| NM_002094 | Homo sapiens G1 to S phase transition 1 (GSPT1), mRNA   |
| NM_000177 | Homo sapiens gelsolin (amyloidosis, Finnish type) (GSN), mRNA   |
| NM_002093 | Homo sapiens glycogen synthase kinase 3 beta (GSK3B), mRNA  |
| NM_002092 | Homo sapiens G-rich RNA sequence binding factor 1 (GRSF1), mRNA   |
| NM_002091 | Homo sapiens gastrin-releasing peptide (GRP), mRNA  |
| NM_002090 | Homo sapiens GRO3 oncogene (GRO3), mRNA   |
| NM_002089 | Homo sapiens GRO2 oncogene (GRO2), mRNA   |
| NM_001511 | Homo sapiens GRO1 oncogene (melanoma growth stimulating activity, alpha)                                      |

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|           | (GRO1), mRNA   |
| NM_002087 | Homo sapiens granulin (GRN), mRNA  |
| NM_000845 | Homo sapiens glutamate receptor, metabotropic 8 (GRM8), mRNA   |
| NM_000844 | Homo sapiens glutamate receptor, metabotropic 7 (GRM7), mRNA   |
| NM_000841 | Homo sapiens glutamate receptor, metabotropic 4 (GRM4), mRNA   |
| NM_000840 | Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA   |
| NM_000176 | Homo sapiens nuclear receptor subfamily 3, group C, member 1 (NR3C1), mRNA   |
| NM_000831 | Homo sapiens glutamate receptor, ionotropic, kainate 3 (GRIK3), mRNA   |
| NM_000830 | Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1), mRNA   |
| NM_002086 | Homo sapiens growth factor receptor-bound protein 2 (GRB2), mRNA   |
| NM_002085 | Homo sapiens glutathione peroxidase 4 (phospholipid hydroperoxidase) (GPX4), mRNA  |
| NM_002083 | Homo sapiens glutathione peroxidase 2 (gastrointestinal) (GPX2), mRNA  |
| NM_002082 | Homo sapiens G protein-coupled receptor kinase 6 (GPRK6), mRNA   |
| NM_001504 | Homo sapiens G protein-coupled receptor 9 (GPR9), mRNA   |
| NM_001508 | Homo sapiens G protein-coupled receptor 39 (GPR39), mRNA   |
| NM_001507 | Homo sapiens G protein-coupled receptor 38 (GPR38), mRNA   |
| NM_001506 | Homo sapiens G protein-coupled receptor 32 (GPR32), mRNA   |
| NM_001505 | Homo sapiens G protein-coupled receptor 30 (GPR30), mRNA   |
| NM_001503 | Homo sapiens glycosylphosphatidylinositol specific phospholipase D1 (GPLD1), mRNA  |
| NM_000408 | Homo sapiens glycerol-3-phosphate dehydrogenase 2 (mitochondrial) (GPD2), mRNA   |
| NM_001448 | Homo sapiens glypican 4 (GPC4), mRNA   |
| NM_002081 | Homo sapiens glypican 1 (GPC1), mRNA   |
| NM_000174 | Homo sapiens glycoprotein IX (platelet) (GP9), mRNA  |
| NM_000173 | Homo sapiens glycoprotein Ib (platelet), alpha polypeptide (GPIBA), mRNA   |
| NM_002080 | Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA |
| NM_002079 | Homo sapiens glutamic-oxaloacetic transaminase 1, soluble (aspartate aminotransferase 1) (GOT1), mRNA  |
| NM_002076 | Homo sapiens glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IIID) (GNS), mRNA  |
| NM_001501 | Homo sapiens gonadotropin-releasing hormone 2 (GNRH2), mRNA  |
| NM_000825 | Homo sapiens gonadotropin-releasing hormone 1 (leutinizing-releasing hormone) (GNRH1), mRNA  |
| NM_002075 | Homo sapiens guanine nucleotide binding protein (G protein), beta polypeptide 3 (GNB3), mRNA   |
| NM_002073 | Homo sapiens guanine nucleotide binding protein (G protein), alpha z polypeptide (GNAZ), mRNA  |
| NM_000172 | Homo sapiens guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 1 (GNAT1), mRNA                                      |
| NM_002072 | Homo sapiens guanine nucleotide binding protein (G protein), q polypeptide (GNAQ), mRNA  |
| NM_002071 | Homo sapiens guanine nucleotide binding protein (G protein), alpha activating activity polypeptide, olfactory type (GNAL), mRNA                          |
| NM_002070 | Homo sapiens guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 (GNAI2), mRNA                                       |
| NM_002068 | Homo sapiens guanine nucleotide binding protein (G protein), alpha 15 (Gq class) (GNA15), mRNA   |



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| NM_002067 | Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11), mRNA   |
| NM_003875 | Homo sapiens guanine monphosphate synthetase (GMPS), mRNA  |
| NM_002066 | Homo sapiens GPI anchored molecule like protein (GML), mRNA  |
| NM_001500 | Homo sapiens GDP-mannose 4,6-dehydratase (GMDS), mRNA  |
| NM_002065 | Homo sapiens glutamate-ammonia ligase (glutamine synthase) (GLUL), mRNA  |
| NM_002064 | Homo sapiens glutaredoxin (thioltransferase) (GLRX), mRNA  |
| NM_000824 | Homo sapiens glycine receptor, beta (GLRB), mRNA   |
| NM_002063 | Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA   |
| NM_002062 | Homo sapiens glucagon-like peptide 1 receptor (GLP1R), mRNA  |
| NM_000170 | Homo sapiens glycine dehydrogenase (decarboxylating; glycine decarboxylase, glycine cleavage system protein P) (GLDC), mRNA                          |
| NM_000169 | Homo sapiens galactosidase, alpha (GLA), mRNA  |
| NM_000167 | Homo sapiens glycerol kinase (GK), mRNA  |
| NM_000166 | Homo sapiens gap junction protein, beta 1, 32kD (connexin 32, Charcot-Marie-Tooth neuropathy, X-linked) (GJB1), mRNA                                 |
| NM_002060 | Homo sapiens gap junction protein, alpha 4, 37kD (connexin 37) (GJA4), mRNA  |
| NM_000164 | Homo sapiens gastric inhibitory polypeptide receptor (GIPR), mRNA  |
| NM_000823 | Homo sapiens growth hormone releasing hormone receptor (GHRHR), mRNA   |
| NM_000163 | Homo sapiens growth hormone receptor (GHR), mRNA   |
| NM_000821 | Homo sapiens gamma-glutamyl carboxylase (GGCX), mRNA   |
| NM_001495 | Homo sapiens GDNF family receptor alpha 2 (GFRA2), mRNA  |
| NM_002055 | Homo sapiens glial fibrillary acidic protein (GFAP), mRNA  |
| NM_003943 | Homo sapiens genethonin 1 (GENX-3414), mRNA  |
| NM_000514 | Homo sapiens glial cell derived neurotrophic factor (GDNF), mRNA   |
| NM_001493 | Homo sapiens GDP dissociation inhibitor 1 (GDI1), mRNA   |
| NM_001491 | Homo sapiens glucosaminyl (N-acetyl) transferase 2, I-branching enzyme (GCNT2), mRNA   |
| NM_001490 | Homo sapiens glucosaminyl (N-acetyl) transferase 1, core 2 (beta-1,6-N-acetylglucosaminyltransferase) (GCNT1), mRNA                                  |
| NM_000160 | Homo sapiens glucagon receptor (GCGR), mRNA  |
| NM_002054 | Homo sapiens glucagon (GCG), mRNA  |
| NM_001485 | Homo sapiens gastrulation brain homeo box 2 (GBX2), mRNA   |
| NM_001483 | Homo sapiens glioblastoma amplified sequence (GBAS), mRNA  |
| NM_002048 | Homo sapiens growth arrest-specific 1 (GAS1), mRNA   |
| NM_001481 | Homo sapiens growth arrest-specific 11 (GAS11), mRNA   |
| NM_000819 | Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase (GART), mRNA |
| NM_002045 | Homo sapiens growth associated protein 43 (GAP43), mRNA  |
| NM_003614 | Homo sapiens galanin receptor 3 (GALR3), mRNA  |
| NM_000154 | Homo sapiens galactokinase 1 (GALK1), mRNA   |
| NM_001477 | Homo sapiens G antigen 7B (GAGE7B), mRNA   |
| NM_001476 | Homo sapiens G antigen 6 (GAGE6), mRNA   |
| NM_001475 | Homo sapiens G antigen 5 (GAGE5), mRNA   |
| NM_001474 | Homo sapiens G antigen 4 (GAGE4), mRNA   |
| NM_001473 | Homo sapiens G antigen 3 (GAGE3), mRNA   |
| NM_001472 | Homo sapiens G antigen 2 (GAGE2), mRNA   |
| NM_001468 | Homo sapiens G antigen 1 (GAGE1), mRNA   |
| NM_000818 | Homo sapiens glutamate decarboxylase 2 (pancreatic islets and brain, 65kD) (GAD2), mRNA  |
| NM_002043 | Homo sapiens gamma-aminobutyric acid (GABA) receptor, rho 2 (GABRR2),  |

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|           | mRNA   |
| NM_002042 | Homo sapiens gamma-aminobutyric acid (GABA) receptor, rho 1 (GABRR1), mRNA   |
| NM_000402 | Homo sapiens glucose-6-phosphate dehydrogenase (G6PD), nuclear gene encoding mitochondrial protein, mRNA                           |
| NM_001469 | Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA   |
| NM_002037 | Homo sapiens FYN oncogene related to SRC, FGR, YES (FYN), mRNA   |
| NM_002036 | Homo sapiens Duffy blood group (FY), mRNA  |
| NM_002035 | Homo sapiens follicular lymphoma variant translocation 1 (FVT1), mRNA  |
| NM_000150 | Homo sapiens fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6), mRNA  |
| NM_002034 | Homo sapiens fucosyltransferase 5 (alpha (1,3) fucosyltransferase) (FUT5), mRNA  |
| NM_002033 | Homo sapiens fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific) (FUT4), mRNA                                  |
| NM_000149 | Homo sapiens fucosyltransferase 3 (galactoside 3(4)-L-fucosyltransferase, Lewis blood group included) (FUT3), mRNA                 |
| NM_000511 | Homo sapiens fucosyltransferase 2 (secretor status included) (FUT2), mRNA  |
| NM_000148 | Homo sapiens fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, Bombay phenotype included) (FUT1), mRNA               |
| NM_000147 | Homo sapiens fucosidase, alpha-L- 1, tissue (FUCA1), mRNA  |
| NM_002032 | Homo sapiens ferritin, heavy polypeptide 1 (FTH1), mRNA  |
| NM_000145 | Homo sapiens follicle stimulating hormone receptor (FSHR), mRNA  |
| NM_000510 | Homo sapiens follicle stimulating hormone, beta polypeptide (FSHB), mRNA   |
| NM_001463 | Homo sapiens frizzled-related protein (FRZB), mRNA   |
| NM_000144 | Homo sapiens Friedreich ataxia (FRDA), mRNA  |
| NM_001462 | Homo sapiens formyl peptide receptor-like 1 (FPRL1), mRNA  |
| NM_002029 | Homo sapiens formyl peptide receptor 1 (FPR1), mRNA  |
| NM_003838 | Homo sapiens fucose-1-phosphate guanylyltransferase (FPGT), mRNA   |
| NM_002027 | Homo sapiens farnesyltransferase, CAAX box, alpha (FNTA), mRNA   |
| NM_002025 | Homo sapiens fragile X mental retardation 2 (FMR2), mRNA   |
| NM_002024 | Homo sapiens fragile X mental retardation 1 (FMR1), mRNA   |
| NM_001461 | Homo sapiens flavin containing monooxygenase 5 (FMO5), mRNA  |
| NM_002022 | Homo sapiens flavin containing monooxygenase 4 (FMO4), mRNA  |
| NM_001460 | Homo sapiens flavin containing monooxygenase 2 (FMO2), mRNA  |
| NM_002021 | Homo sapiens flavin containing monooxygenase 1 (FMO1), mRNA  |
| NM_002020 | Homo sapiens fms-related tyrosine kinase 4 (FLT4), mRNA  |
| NM_001459 | Homo sapiens fms-related tyrosine kinase 3 ligand (FLT3LG), mRNA   |
| NM_002019 | Homo sapiens fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) (FLT1), mRNA |
| NM_001455 | Homo sapiens forkhead box O3A (FOXO3A), mRNA   |
| NM_001453 | Homo sapiens forkhead box C1 (FOXC1), mRNA   |
| NM_001451 | Homo sapiens forkhead box F1 (FOXF1), mRNA   |
| NM_001450 | Homo sapiens four and a half LIM domains 2 (FHL2), mRNA  |
| NM_001449 | Homo sapiens four and a half LIM domains 1 (FHL1), mRNA  |
| NM_002012 | Homo sapiens fragile histidine triad gene (FHIT), mRNA   |
| NM_000143 | Homo sapiens fumarate hydratase (FH), mRNA   |
| NM_002002 | Homo sapiens Fc fragment of IgE, low affinity II, receptor for (CD23A) (FCER2), mRNA   |
| NM_002001 | Homo sapiens Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide (FCER1A), mRNA                                   |
| NM_002000 | Homo sapiens Fc fragment of IgA, receptor for (FCAR), mRNA   |

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| NM_003837 | Homo sapiens fructose-1,6-bisphosphatase 2 (FBP2), mRNA   |
| NM_001998 | Homo sapiens fibulin 2 (FBLN2), mRNA  |
| NM_003923 | Homo sapiens forkhead box H1 (FOXH1), mRNA  |
| NM_003950 | Homo sapiens coagulation factor II (thrombin) receptor-like 3 (F2RL3), mRNA   |
| NM_003975 | Homo sapiens SH2 domain protein 2A (SH2D2A), mRNA   |
| NM_001440 | Homo sapiens exostoses (multiple)-like 3 (EXTL3), mRNA  |
| NM_001988 | Homo sapiens envoplakin (EVPL), mRNA  |
| NM_001985 | Homo sapiens electron-transfer-flavoprotein, beta polypeptide (ETFB), mRNA  |
| NM_000126 | Homo sapiens electron-transfer-flavoprotein, alpha polypeptide (glutaric aciduria II) (ETFA), nuclear gene encoding mitochondrial protein, mRNA                                       |
| NM_001438 | Homo sapiens estrogen-related receptor gamma (ESRRG), mRNA  |
| NM_000125 | Homo sapiens estrogen receptor 1 (ESR1), mRNA   |
| NM_000123 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 5 (xeroderma pigmentosum, complementation group G (Cockayne syndrome)) (ERCC5), mRNA |
| NM_001983 | Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence) (ERCC1), mRNA                            |
| NM_000502 | Homo sapiens eosinophil peroxidase (EPX), mRNA  |
| NM_001981 | Homo sapiens epidermal growth factor receptor pathway substrate 15 (EPS15), mRNA  |
| NM_000799 | Homo sapiens erythropoietin (EPO), mRNA   |
| NM_001980 | Homo sapiens epimorphin (EPIM), mRNA  |
| NM_001431 | Homo sapiens erythrocyte membrane protein band 4.1-like 2 (EPB41L2), mRNA   |
| NM_001430 | Homo sapiens endothelial PAS domain protein 1 (EPAS1), mRNA   |
| NM_001977 | Homo sapiens glutamyl aminopeptidase (aminopeptidase A) (ENPEP), mRNA   |
| NM_001974 | Homo sapiens egf-like module containing, mucin-like, hormone receptor-like sequence 1 (EMR1), mRNA  |
| NM_001425 | Homo sapiens epithelial membrane protein 3 (EMP3), mRNA   |
| NM_001424 | Homo sapiens epithelial membrane protein 2 (EMP2), mRNA   |
| NM_001423 | Homo sapiens epithelial membrane protein 1 (EMP1), mRNA   |
| NM_001421 | Homo sapiens E74-like factor 4 (ets domain transcription factor) (ELF4), mRNA   |
| NM_001419 | Homo sapiens ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R) (ELAVL1), mRNA  |
| NM_001972 | Homo sapiens elastase 2, neutrophil (ELA2), mRNA  |
| NM_001970 | Homo sapiens eukaryotic translation initiation factor 5A (EIF5A), mRNA  |
| NM_001418 | Homo sapiens eukaryotic translation initiation factor 4 gamma, 2 (EIF4G2), mRNA   |
| NM_003732 | Homo sapiens eukaryotic translation initiation factor 4E binding protein 3 (EIF4EBP3), mRNA   |
| NM_001968 | Homo sapiens eukaryotic translation initiation factor 4E (EIF4E), mRNA  |
| NM_001416 | Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1), mRNA  |
| NM_003753 | Homo sapiens eukaryotic translation initiation factor 3, subunit 7 (zeta, 66/67kD) (EIF3S7), mRNA   |
| NM_001568 | Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6), mRNA  |
| NM_003754 | Homo sapiens eukaryotic translation initiation factor 3, subunit 5 (epsilon, 47kD) (EIF3S5), mRNA   |
| NM_003757 | Homo sapiens eukaryotic translation initiation factor 3, subunit 2 (beta, 36kD) (EIF3S2), mRNA  |
| NM_003750 | Homo sapiens eukaryotic translation initiation factor 3, subunit 10 (theta,   |

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|           | 150/170kD) (EIF3S10), mRNA   |
| NM_001415 | Homo sapiens eukaryotic translation initiation factor 2, subunit 3 (gamma, 52kD) (EIF2S3), mRNA  |
| NM_003908 | Homo sapiens eukaryotic translation initiation factor 2, subunit 2 (beta, 38kD) (EIF2S2), mRNA   |
| NM_001966 | Homo sapiens enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase (EHHADH), nuclear gene encoding mitochondrial protein, mRNA                                  |
| NM_001965 | Homo sapiens early growth response 4 (EGR4), mRNA  |
| NM_001964 | Homo sapiens early growth response 1 (EGR1), mRNA  |
| NM_001406 | Homo sapiens ephrin-B3 (EFNB3), mRNA   |
| NM_001962 | Homo sapiens ephrin-A5 (EFNA5), mRNA   |
| NM_001405 | Homo sapiens ephrin-A2 (EFNA2), mRNA   |
| NM_001961 | Homo sapiens eukaryotic translation elongation factor 2 (EEF2), mRNA   |
| NM_001958 | Homo sapiens eukaryotic translation elongation factor 1 alpha 2 (EEF1A2), mRNA   |
| NM_001956 | Homo sapiens endothelin 2 (EDN2), mRNA   |
| NM_001955 | Homo sapiens endothelin 1 (EDN1), mRNA   |
| NM_003775 | Homo sapiens endothelial differentiation, G-protein-coupled receptor 6 (EDG6), mRNA  |
| NM_001399 | Homo sapiens ectodermal dysplasia 1, anhidrotic (ED1), mRNA  |
| NM_001397 | Homo sapiens endothelin converting enzyme 1 (ECE1), mRNA   |
| NM_003240 | Homo sapiens endometrial bleeding associated factor (left-right determination, factor A; transforming growth factor beta superfamily) (EBAF), mRNA                           |
| NM_001948 | Homo sapiens dUTP pyrophosphatase (DUT), mRNA  |
| NM_001945 | Homo sapiens diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor) (DTR), mRNA  |
| NM_001939 | Homo sapiens dystrophin related protein 2 (DRP2), mRNA   |
| NM_001938 | Homo sapiens down-regulator of transcription 1, TBP-binding (negative cofactor 2) (DR1), mRNA  |
| NM_001387 | Homo sapiens dihydropyrimidinase-like 3 (DPYSL3), mRNA   |
| NM_001385 | Homo sapiens dihydropyrimidinase (DPYS), mRNA  |
| NM_001935 | Homo sapiens dipeptidylpeptidase IV (CD26, adenosine deaminase complexing protein 2) (DPP4), mRNA  |
| NM_003863 | Homo sapiens dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit (DPM2), mRNA   |
| NM_001380 | Homo sapiens dedicator of cyto-kinesis 1 (DOCK1), mRNA   |
| NM_001379 | Homo sapiens DNA (cytosine-5-)-methyltransferase 1 (DNMT1), mRNA   |
| NM_001375 | Homo sapiens deoxyribonuclease II, lysosomal (DNASE2), mRNA  |
| NM_001374 | Homo sapiens deoxyribonuclease I-like 2 (DNASE1L2), mRNA   |
| NM_001934 | Homo sapiens distal-less homeobox 4 (DLX4), mRNA   |
| NM_001933 | Homo sapiens dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST), mRNA   |
| NM_001362 | Homo sapiens deiodinase, iodothyronine, type III (DIO3), mRNA  |
| NM_001360 | Homo sapiens 7-dehydrocholesterol reductase (DHCR7), mRNA  |
| NM_003670 | Homo sapiens basic helix-loop-helix domain containing, class B, 2 (BHLHB2), mRNA   |
| NM_001354 | Homo sapiens aldo-keto reductase family 1, member C2 (dihydrodiol dehydrogenase 2; bile acid binding protein; 3-alpha hydroxysteroid dehydrogenase, type III) (AKR1C2), mRNA |
| NM_000790 | Homo sapiens dopa decarboxylase (aromatic L-amino acid decarboxylase) (DDC), mRNA  |

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| NM_000789 | Homo sapiens dipeptidyl carboxypeptidase 1 (angiotensin I converting enzyme) (ACE), mRNA  |
| NM_001920 | Homo sapiens decorin (DCN), mRNA  |
| NM_000788 | Homo sapiens deoxycytidine kinase (DCK), mRNA   |
| NM_001919 | Homo sapiens dodecenoyl-Coenzyme A delta isomerase (3,2 trans-enoyl-Coenzyme A isomerase) (DCI), mRNA   |
| NM_001918 | Homo sapiens dihydrolipoamide branched chain transacylase (E2 component of branched chain keto acid dehydrogenase complex; maple syrup urine disease) (DBT), mRNA |
| NM_001352 | Homo sapiens D site of albumin promoter (albumin D-box) binding protein (DBP), mRNA   |
| NM_001351 | Homo sapiens deleted in azoospermia-like (DAZL), mRNA   |
| NM_001350 | Homo sapiens death-associated protein 6 (DAXX), mRNA  |
| NM_001344 | Homo sapiens defender against cell death 1 (DAD1), mRNA   |
| NM_003472 | Homo sapiens DEK oncogene (DNA binding) (DEK), mRNA   |
| NM_000776 | Homo sapiens cytochrome P450, subfamily IIIA (naphedipine oxidase), polypeptide 3 (CYP3A3), mRNA  |
| NM_001916 | Homo sapiens cytochrome c-1 (CYC1), mRNA  |
| NM_001914 | Homo sapiens cytochrome b-5 (CYB5), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_003928 | Homo sapiens CAAX box 1 (CXX1), mRNA  |
| NM_003611 | Homo sapiens chromosome X open reading frame 5 (CXORF5), mRNA   |
| NM_003467 | Homo sapiens chemokine (C-X-C motif), receptor 4 (fusin) (CXCR4), mRNA  |
| NM_001338 | Homo sapiens coxsackie virus and adenovirus receptor (CXADR), mRNA  |
| NM_003478 | Homo sapiens cullin 5 (CUL5), mRNA  |
| NM_003591 | Homo sapiens cullin 2 (CUL2), mRNA  |
| NM_001336 | Homo sapiens cathepsin Z (CTS2), mRNA   |
| NM_001335 | Homo sapiens cathepsin W (lymphopain) (CTSW), mRNA  |
| NM_001912 | Homo sapiens cathepsin L (CTSL), mRNA   |
| NM_001333 | Homo sapiens cathepsin L2 (CTSL2), mRNA   |
| NM_000396 | Homo sapiens cathepsin K (pseudosostosis) (CTSK), mRNA  |
| NM_001911 | Homo sapiens cathepsin G (CTSG), mRNA   |
| NM_001910 | Homo sapiens cathepsin E (CTSE), mRNA   |
| NM_001909 | Homo sapiens cathepsin D (lysosomal aspartyl protease) (CTSD), mRNA   |
| NM_001814 | Homo sapiens cathepsin C (CTSC), mRNA   |
| NM_001908 | Homo sapiens cathepsin B (CTSB), mRNA   |
| NM_001907 | Homo sapiens chymotrypsin-like (CTRL), mRNA   |
| NM_001906 | Homo sapiens chymotrypsinogen B1 (CTRB1), mRNA  |
| NM_001905 | Homo sapiens CTP synthase (CTPS), mRNA  |
| NM_001904 | Homo sapiens catenin (cadherin-associated protein), beta 1 (88kD) (CTNNB1), mRNA  |
| NM_003798 | Homo sapiens catenin (cadherin-associated protein), alpha-like 1 (CTNNAL1), mRNA  |
| NM_001903 | Homo sapiens catenin (cadherin-associated protein), alpha 1 (102kD) (CTNNA1), mRNA  |
| NM_001902 | Homo sapiens cystathionase (cystathionine gamma-lyase) (CTH), mRNA  |
| NM_001901 | Homo sapiens connective tissue growth factor (CTGF), mRNA   |
| NM_001330 | Homo sapiens cardiotrophin 1 (CTF1), mRNA   |
| NM_000100 | Homo sapiens cystatin B (stefin B) (CSTB), mRNA   |
| NM_003650 | Homo sapiens cystatin F (leukocystatin) (CST7), mRNA  |
| NM_001323 | Homo sapiens cystatin E/M (CST6), mRNA  |
| NM_001900 | Homo sapiens cystatin D (CST5), mRNA  |

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| NM_001899 | Homo sapiens cystatin S (CST4), mRNA   |
| NM_000099 | Homo sapiens cystatin C (amyloid angiopathy and cerebral hemorrhage) (CST3), mRNA                                      |
| NM_001322 | Homo sapiens cystatin SA (CST2), mRNA  |
| NM_001898 | Homo sapiens cystatin SN (CST1), mRNA  |
| NM_001321 | Homo sapiens cysteine and glycine-rich protein 2 (CSRP2), mRNA   |
| NM_001896 | Homo sapiens casein kinase 2, alpha prime polypeptide (CSNK2A2), mRNA  |
| NM_001895 | Homo sapiens casein kinase 2, alpha 1 polypeptide (CSNK2A1), mRNA  |
| NM_001894 | Homo sapiens casein kinase 1, epsilon (CSNK1E), mRNA   |
| NM_001893 | Homo sapiens casein kinase 1, delta (CSNK1D), mRNA   |
| NM_001892 | Homo sapiens casein kinase 1, alpha 1 (CSNK1A1), mRNA  |
| NM_001891 | Homo sapiens casein, beta (CSN2), mRNA   |
| NM_001890 | Homo sapiens casein, alpha (CSN1), mRNA  |
| NM_000760 | Homo sapiens colony stimulating factor 3 receptor (granulocyte) (CSF3R), mRNA  |
| NM_000759 | Homo sapiens colony stimulating factor 3 (granulocyte) (CSF3), mRNA  |
| NM_000758 | Homo sapiens colony stimulating factor 2 (granulocyte-macrophage) (CSF2), mRNA   |
| NM_000757 | Homo sapiens colony stimulating factor 1 (macrophage) (CSF1), mRNA   |
| NM_003651 | Homo sapiens cold shock domain protein A (CSDA), mRNA  |
| NM_001315 | Homo sapiens mitogen-activated protein kinase 14 (MAPK14), mRNA  |
| NM_001884 | Homo sapiens cartilage linking protein 1 (CRTL1), mRNA   |
| NM_001313 | Homo sapiens collapsin response mediator protein 1 (CRMP1), mRNA   |
| NM_001312 | Homo sapiens cysteine-rich protein 2 (CRIP2), mRNA   |
| NM_001311 | Homo sapiens cysteine-rich protein 1 (intestinal) (CRIP1), mRNA  |
| NM_000756 | Homo sapiens corticotropin releasing hormone (CRH), mRNA   |
| NM_001881 | Homo sapiens cAMP responsive element modulator (CREM), mRNA  |
| NM_003851 | Homo sapiens cellular repressor of E1A-stimulated genes (CREG), mRNA   |
| NM_001310 | Homo sapiens cAMP responsive element binding protein-like 2 (CREBL2), mRNA   |
| NM_001880 | Homo sapiens activating transcription factor 2 (ATF2), mRNA  |
| NM_003805 | Homo sapiens CASP2 and RIPK1 domain containing adaptor with death domain (CRADD), mRNA                                 |
| NM_001877 | Homo sapiens complement component (3d/Epstein Barr virus) receptor 2 (CR2), mRNA                                       |
| NM_000098 | Homo sapiens carnitine palmitoyltransferase II (CPT2), nuclear gene encoding mitochondrial protein, mRNA               |
| NM_001876 | Homo sapiens carnitine palmitoyltransferase I, liver (CPT1A), nuclear gene encoding mitochondrial protein, mRNA        |
| NM_001875 | Homo sapiens carbamoyl-phosphate synthetase 1, mitochondrial (CPS1), nuclear gene encoding mitochondrial protein, mRNA |
| NM_000097 | Homo sapiens coproporphyrinogen oxidase (coproporphyrin, harderoporphyrin) (CPO), mRNA                                 |
| NM_001871 | Homo sapiens carboxypeptidase B1 (tissue) (CPB1), mRNA   |
| NM_001870 | Homo sapiens carboxypeptidase A3 (mast cell) (CPA3), mRNA  |
| NM_001869 | Homo sapiens carboxypeptidase A2 (pancreatic) (CPA2), mRNA   |
| NM_001868 | Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1), mRNA   |
| NM_003571 | Homo sapiens beaded filament structural protein 2, phakinin (BFSP2), mRNA  |
| NM_001302 | Homo sapiens cortistatin (CORT), mRNA  |
| NM_003832 | Homo sapiens phosphoserine phosphatase-like (PSPHL), mRNA  |
| NM_001843 | Homo sapiens contactin 1 (CNTN1), mRNA   |
| NM_001842 | Homo sapiens ciliary neurotrophic factor receptor (CNTFR), mRNA  |

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| NM_001839 | Homo sapiens calponin 3, acidic (CNN3), mRNA  |
| NM_001299 | Homo sapiens calponin 1, basic, smooth muscle (CNN1), mRNA  |
| NM_001297 | Homo sapiens cyclic nucleotide gated channel beta 1 (CNGB1), mRNA   |
| NM_001298 | Homo sapiens cyclic nucleotide gated channel alpha 3 (CNGA3), mRNA  |
| NM_000087 | Homo sapiens cyclic nucleotide gated channel alpha 1 (CNGA1), mRNA  |
| NM_003570 | Homo sapiens cytidine monophosphate-N-acetylneuraminic acid hydroxylase (CMP-N-acetylneuraminate monooxygenase) (CMAH), mRNA                                    |
| NM_001836 | Homo sapiens chymase 1, mast cell (CMA1), mRNA  |
| NM_001831 | Homo sapiens clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2, testosterone-repressed prostate message 2, apolipoprotein J) (CLU), mRNA |
| NM_001294 | Homo sapiens cleft lip and palate associated transmembrane protein 1 (CLPTM1), mRNA   |
| NM_003476 | Homo sapiens cysteine and glycine-rich protein 3 (cardiac LIM protein) (CSRP3), mRNA  |
| NM_001293 | Homo sapiens chloride channel, nucleotide-sensitive, 1A (CLNS1A), mRNA  |
| NM_003277 | Homo sapiens claudin 5 (transmembrane protein deleted in velocardiofacial syndrome) (CLDN5), mRNA   |
| NM_001306 | Homo sapiens claudin 3 (CLDN3), mRNA  |
| NM_001829 | Homo sapiens chloride channel 3 (CLCN3), mRNA   |
| NM_001284 | Homo sapiens adaptor-related protein complex 3, sigma 1 subunit (AP3S1), mRNA   |
| NM_001827 | Homo sapiens CDC28 protein kinase 2 (CKS2), mRNA  |
| NM_001826 | Homo sapiens CDC28 protein kinase 1 (CKS1), mRNA  |
| NM_001824 | Homo sapiens creatine kinase, muscle (CKM), mRNA  |
| NM_001823 | Homo sapiens creatine kinase, brain (CKB), mRNA   |
| NM_001281 | Homo sapiens cytoskeleton-associated protein 1 (CKAP1), mRNA  |
| NM_003613 | Homo sapiens cartilage intermediate layer protein, nucleotide pyrophosphohydrolase (CILP), mRNA   |
| NM_001278 | Homo sapiens conserved helix-loop-helix ubiquitous kinase (CHUK), mRNA  |
| NM_003654 | Homo sapiens carbohydrate (chondroitin 6/keratan) sulfotransferase 1 (CHST1), mRNA  |
| NM_000750 | Homo sapiens cholinergic receptor, nicotinic, beta polypeptide 4 (CHRNA4), mRNA   |
| NM_000749 | Homo sapiens cholinergic receptor, nicotinic, beta polypeptide 3 (CHRNA3), mRNA   |
| NM_000748 | Homo sapiens cholinergic receptor, nicotinic, beta polypeptide 2 (neuronal) (CHRNA2), mRNA  |
| NM_000746 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 7 (CHRNA7), mRNA  |
| NM_000745 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 5 (CHRNA5), mRNA  |
| NM_000744 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 4 (CHRNA4), mRNA  |
| NM_000743 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 3 (CHRNA3), mRNA  |
| NM_000742 | Homo sapiens cholinergic receptor, nicotinic, alpha polypeptide 2 (neuronal) (CHRNA2), mRNA   |
| NM_000741 | Homo sapiens cholinergic receptor, muscarinic 4 (CHRM4), mRNA   |
| NM_000740 | Homo sapiens cholinergic receptor, muscarinic 3 (CHRM3), mRNA   |
| NM_000739 | Homo sapiens cholinergic receptor, muscarinic 2 (CHRM2), mRNA   |
| NM_000738 | Homo sapiens cholinergic receptor, muscarinic 1 (CHRM1), mRNA   |

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| NM_001822 | Homo sapiens chimerin (chimaerin) 1 (CHN1), mRNA   |
| NM_001821 | Homo sapiens choroideremia-like (Rab escort protein 2) (CHML), mRNA                                |
| NM_001819 | Homo sapiens chromogranin B (secretogranin 1) (CHGB), mRNA   |
| NM_001269 | Homo sapiens chromosome condensation 1 (CHC1), mRNA  |
| NM_001267 | Homo sapiens chondroadherin (CHAD), mRNA   |
| NM_001817 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 4 (CEACAM4), mRNA             |
| NM_001816 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8), mRNA             |
| NM_001815 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 3 (CEACAM3), mRNA             |
| NM_003663 | Homo sapiens CGG triplet repeat binding protein 1 (CGGBP1), mRNA                                   |
| NM_001813 | Homo sapiens centromere protein E (312kD) (CENPE), mRNA  |
| NM_001808 | Homo sapiens carboxyl ester lipase-like (bile salt-stimulated lipase-like) (CELL), mRNA            |
| NM_001807 | Homo sapiens carboxyl ester lipase (bile salt-stimulated lipase) (CEL), mRNA                       |
| NM_001805 | Homo sapiens CCAAT/enhancer binding protein (C/EBP), epsilon (CEBPE), mRNA                         |
| NM_001265 | Homo sapiens caudal type homeo box transcription factor 2 (CDX2), mRNA                             |
| NM_001804 | Homo sapiens caudal type homeo box transcription factor 1 (CDX1), mRNA                             |
| NM_001803 | Homo sapiens CDW52 antigen (CAMPATH-1 antigen) (CDW52), mRNA                                       |
| NM_001264 | Homo sapiens corneodesmosin (CDSN), mRNA   |
| NM_001263 | Homo sapiens CDP-diacylglycerol synthase (phosphatidate cytidylyltransferase) 1 (CDS1), mRNA       |
| NM_001801 | Homo sapiens cysteine dioxygenase, type I (CDO1), mRNA   |
| NM_001769 | Homo sapiens CD9 antigen (p24) (CD9), mRNA   |
| NM_001768 | Homo sapiens CD8 antigen, alpha polypeptide (p32) (CD8A), mRNA                                     |
| NM_003874 | Homo sapiens CD84 antigen (leukocyte antigen) (CD84), mRNA   |
| NM_001781 | Homo sapiens CD69 antigen (p60, early T-cell activation antigen) (CD69), mRNA                      |
| NM_001780 | Homo sapiens CD63 antigen (melanoma 1 antigen) (CD63), mRNA  |
| NM_001779 | Homo sapiens CD58 antigen, (lymphocyte function-associated antigen 3) (CD58), mRNA                 |
| NM_001778 | Homo sapiens CD48 antigen (B-cell membrane protein) (CD48), mRNA                                   |
| NM_001777 | Homo sapiens CD47 antigen (Rh-related antigen, integrin-associated signal transducer) (CD47), mRNA |
| NM_000733 | Homo sapiens CD3E antigen, epsilon polypeptide (TiT3 complex) (CD3E), mRNA                         |
| NM_000732 | Homo sapiens CD3D antigen, delta polypeptide (TiT3 complex) (CD3D), mRNA                           |
| NM_001776 | Homo sapiens ectonucleoside triphosphate diphosphohydrolase 1 (ENTPD1), mRNA                       |
| NM_001775 | Homo sapiens CD38 antigen (p45) (CD38), mRNA   |
| NM_001774 | Homo sapiens CD37 antigen (CD37), mRNA   |
| NM_001773 | Homo sapiens CD34 antigen (CD34), mRNA   |
| NM_003830 | Homo sapiens sialic acid binding Ig-like lectin 5 (SIGLEC5), mRNA                                  |
| NM_001245 | Homo sapiens sialic acid binding Ig-like lectin 6 (SIGLEC6), mRNA                                  |
| NM_001772 | Homo sapiens CD33 antigen (gp67) (CD33), mRNA  |
| NM_001767 | Homo sapiens CD2 antigen (p50), sheep red blood cell receptor (CD2), mRNA                          |
| NM_001771 | Homo sapiens CD22 antigen (CD22), mRNA   |
| NM_001766 | Homo sapiens CD1D antigen, d polypeptide (CD1D), mRNA  |
| NM_001765 | Homo sapiens CD1C antigen, c polypeptide (CD1C), mRNA  |



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| NM_001764 | Homo sapiens CD1B antigen, b polypeptide (CD1B), mRNA   |
| NM_001838 | Homo sapiens chemokine (C-C motif) receptor 7 (CCR7), mRNA  |
| NM_001837 | Homo sapiens chemokine (C-C motif) receptor 3 (CCR3), mRNA  |
| NM_001758 | Homo sapiens cyclin D1 (PRAD1 parathyroid adenomatosis 1) (CCND1), mRNA                                     |
| NM_000731 | Homo sapiens cholecystokinin B receptor (CCKBR), mRNA   |
| NM_000730 | Homo sapiens cholecystokinin A receptor (CCKAR), mRNA   |
| NM_001757 | Homo sapiens carbonyl reductase 1 (CBR1), mRNA  |
| NM_001754 | Homo sapiens runt-related transcription factor 1 (acute myeloid leukemia 1; aml1 oncogene) (RUNX1), mRNA    |
| NM_003688 | Homo sapiens calcium/calmodulin-dependent serine protein kinase (MAGUK family) (CASK), mRNA                 |
| NM_001747 | Homo sapiens capping protein (actin filament), gelsolin-like (CAPG), mRNA                                   |
| NM_001744 | Homo sapiens calcium/calmodulin-dependent protein kinase IV (CAMK4), mRNA                                   |
| NM_001743 | Homo sapiens calmodulin 2 (phosphorylase kinase, delta) (CALM2), mRNA                                       |
| NM_001742 | Homo sapiens calcitonin receptor (CALCR), mRNA  |
| NM_001741 | Homo sapiens calcitonin/calcitonin-related polypeptide, alpha (CALCA), mRNA                                 |
| NM_000727 | Homo sapiens calcium channel, voltage-dependent, gamma subunit 1 (CACNG1), mRNA                             |
| NM_000726 | Homo sapiens calcium channel, voltage-dependent, beta 4 subunit (CACNB4), mRNA                              |
| NM_000725 | Homo sapiens calcium channel, voltage-dependent, beta 3 subunit (CACNB3), mRNA                              |
| NM_000724 | Homo sapiens calcium channel, voltage-dependent, beta 2 subunit (CACNB2), mRNA                              |
| NM_000723 | Homo sapiens calcium channel, voltage-dependent, beta 1 subunit (CACNB1), mRNA                              |
| NM_000721 | Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA                           |
| NM_000720 | Homo sapiens calcium channel, voltage-dependent, L type, alpha 1D subunit (CACNA1D), mRNA                   |
| NM_000719 | Homo sapiens calcium channel, voltage-dependent, L type, alpha 1C subunit (CACNA1C), mRNA                   |
| NM_000718 | Homo sapiens calcium channel, voltage-dependent, L type, alpha 1B subunit (CACNA1B), mRNA                   |
| NM_001739 | Homo sapiens carbonic anhydrase VA, mitochondrial (CA5A), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001738 | Homo sapiens carbonic anhydrase I (CA1), mRNA   |
| NM_001737 | Homo sapiens complement component 9 (C9), mRNA  |
| NM_001736 | Homo sapiens complement component 5 receptor 1 (C5a ligand) (C5R1), mRNA                                    |
| NM_001735 | Homo sapiens complement component 5 (C5), mRNA  |
| NM_003956 | Homo sapiens cholesterol 25-hydroxylase (CH25H), mRNA   |
| NM_001734 | Homo sapiens complement component 1, s subcomponent (C1S), mRNA   |
| NM_001733 | Homo sapiens complement component 1, r subcomponent (C1R), mRNA   |
| NM_001732 | Homo sapiens butyrophilin, subfamily 1, member A1 (BTN1A1), mRNA  |
| NM_001731 | Homo sapiens B-cell translocation gene 1, anti-proliferative (BTG1), mRNA                                   |
| NM_001729 | Homo sapiens betacellulin (BTC), mRNA   |
| NM_001728 | Homo sapiens basigin (BSG), mRNA  |
| NM_003742 | Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 11 (ABCB11), mRNA                         |
| NM_001727 | Homo sapiens bombesin-like receptor 3 (BRS3), mRNA  |

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| NM_000059 | Homo sapiens breast cancer 2, early onset (BRCA2), mRNA   |
| NM_001725 | Homo sapiens bactericidal/permeability-increasing protein (BPI), mRNA   |
| NM_001724 | Homo sapiens 2,3-bisphosphoglycerate mutase (BPGM), mRNA  |
| NM_001723 | Homo sapiens bullous pemphigoid antigen 1 (230/240kD) (BPAG1), mRNA   |
| NM_001717 | Homo sapiens basophilic (BNC), mRNA   |
| NM_001722 | Homo sapiens BN51 (BHK21) temperature sensitivity complementing (BN51T), mRNA   |
| NM_001721 | Homo sapiens BMX non-receptor tyrosine kinase (BMX), mRNA   |
| NM_001203 | Homo sapiens bone morphogenetic protein receptor, type IB (BMPRII), mRNA  |
| NM_001720 | Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8), mRNA   |
| NM_001719 | Homo sapiens bone morphogenetic protein 7 (osteogenic protein 1) (BMP7), mRNA   |
| NM_001202 | Homo sapiens bone morphogenetic protein 4 (BMP4), mRNA  |
| NM_000713 | Homo sapiens biliverdin reductase B (flavin reductase (NADPH)) (BLVRB), mRNA  |
| NM_000712 | Homo sapiens biliverdin reductase A (BLVRA), mRNA   |
| NM_001713 | Homo sapiens betaine-homocysteine methyltransferase (BHMT), mRNA  |
| NM_001712 | Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein) (CEACAM1), mRNA                           |
| NM_001711 | Homo sapiens biglycan (BGN), mRNA   |
| NM_000711 | Homo sapiens bone gamma-carboxylglutamate (gla) protein (osteocalcin) (BGLAP), mRNA   |
| NM_001709 | Homo sapiens brain-derived neurotrophic factor (BDNF), mRNA   |
| NM_000710 | Homo sapiens bradykinin receptor B1 (BDKRB1), mRNA  |
| NM_001707 | Homo sapiens B-cell CLL/lymphoma 7B (BCL7B), mRNA   |
| NM_001706 | Homo sapiens B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6), mRNA  |
| NM_003921 | Homo sapiens B-cell CLL/lymphoma 10 (BCL10), mRNA   |
| NM_003657 | Homo sapiens breast carcinoma amplified sequence 1 (BCAS1), mRNA  |
| NM_001188 | Homo sapiens BCL2-antagonist/killer 1 (BAK1), mRNA  |
| NM_001704 | Homo sapiens brain-specific angiogenesis inhibitor 3 (BAI3), mRNA   |
| NM_001703 | Homo sapiens brain-specific angiogenesis inhibitor 2 (BAI2), mRNA   |
| NM_001702 | Homo sapiens brain-specific angiogenesis inhibitor 1 (BAI1), mRNA   |
| NM_001186 | Homo sapiens BTB and CNC homology 1, basic leucine zipper transcription factor 1 (BACH1), mRNA  |
| NM_001701 | Homo sapiens bile acid Coenzyme A amino acid N-acyltransferase (glycine N-choloyltransferase) (BAAT), mRNA                              |
| NM_001185 | Homo sapiens alpha-2-glycoprotein 1, zinc (AZGP1), mRNA   |
| NM_001184 | Homo sapiens ataxia telangiectasia and Rad3 related (ATR), mRNA   |
| NM_000053 | Homo sapiens ATPase, Cu <sup>++</sup> transporting, beta polypeptide (Wilson disease) (ATP7B), mRNA                                     |
| NM_003945 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) 9kD (ATP6H), mRNA                                    |
| NM_001696 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) 31kD (ATP6E), mRNA                                   |
| NM_001693 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump), beta polypeptide, 56/58kD, isoform 2 (ATP6B2), mRNA |
| NM_001692 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump), beta polypeptide, 56/58kD, isoform 1 (ATP6B1), mRNA |
| NM_001691 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump), alpha polypeptide, 70kD, isoform 2 (ATP6A2), mRNA   |
| NM_001690 | Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump),   |

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|           | alpha polypeptide, 70kD, isoform 1 (ATP6A1), mRNA   |
| NM_001697 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, O subunit (oligomycin sensitivity conferring protein) (ATP5O), mRNA         |
| NM_001686 | Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, beta polypeptide (ATP5B), nuclear gene encoding mitochondrial protein, mRNA |
| NM_000704 | Homo sapiens ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, alpha polypeptide (ATP4A), mRNA   |
| NM_001684 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, plasma membrane 4 (ATP2B4), mRNA  |
| NM_001682 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, plasma membrane 1 (ATP2B1), mRNA  |
| NM_001681 | Homo sapiens ATPase, Ca <sup>++</sup> transporting, cardiac muscle, slow twitch 2 (ATP2A2), mRNA  |
| NM_001679 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 3 polypeptide (ATP1B3), mRNA  |
| NM_001678 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 2 polypeptide (ATP1B2), mRNA  |
| NM_001677 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 1 polypeptide (ATP1B1), mRNA  |
| NM_000703 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 3 polypeptide (ATP1A3), mRNA   |
| NM_000702 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 2 (+) polypeptide (ATP1A2), mRNA   |
| NM_000701 | Homo sapiens ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 1 polypeptide (ATP1A1), mRNA   |
| NM_000051 | Homo sapiens ataxia telangiectasia mutated (includes complementation groups A, C and D) (ATM), mRNA   |
| NM_001675 | Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4), mRNA   |
| NM_001673 | Homo sapiens asparagine synthetase (ASNS), mRNA   |
| NM_000048 | Homo sapiens argininosuccinate lyase (ASL), mRNA  |
| NM_001670 | Homo sapiens armadillo repeat gene deletes in velocardiofacial syndrome (ARVCF), mRNA   |
| NM_001179 | Homo sapiens ADP-ribosyltransferase 3 (ART3), mRNA  |
| NM_000047 | Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA   |
| NM_001178 | Homo sapiens aryl hydrocarbon receptor nuclear translocator-like (ARNTL), mRNA  |
| NM_001668 | Homo sapiens aryl hydrocarbon receptor nuclear translocator (ARNT), mRNA  |
| NM_001667 | Homo sapiens ADP-ribosylation factor-like 2 (ARL2), mRNA  |
| NM_001176 | Homo sapiens Rho GDP dissociation inhibitor (GDI) gamma (ARHGDIG), mRNA   |
| NM_001665 | Homo sapiens ras homolog gene family, member G (rho G) (ARHG), mRNA   |
| NM_001661 | Homo sapiens ADP-ribosylation factor 4-like (ARF4L), mRNA   |
| NM_001659 | Homo sapiens ADP-ribosylation factor 3 (ARF3), mRNA   |
| NM_001657 | Homo sapiens amphiregulin (schwannoma-derived growth factor) (AREG), mRNA   |
| NM_001654 | Homo sapiens v-raf murine sarcoma 3611 viral oncogene homolog 1 (ARAF1), mRNA   |
| NM_001169 | Homo sapiens aquaporin 8 (AQP8), mRNA   |
| NM_001651 | Homo sapiens aquaporin 5 (AQP5), mRNA   |
| NM_001648 | Homo sapiens kallikrein 3, (prostate specific antigen) (KLK3), mRNA   |
| NM_000484 | Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA   |

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| NM_001647 | Homo sapiens apolipoprotein D (APOD), mRNA  |
| NM_001646 | Homo sapiens apolipoprotein C-IV (APOC4), mRNA  |
| NM_000384 | Homo sapiens apolipoprotein B (including Ag(x) antigen) (APOB), mRNA  |
| NM_001643 | Homo sapiens apolipoprotein A-II (APOA2), mRNA  |
| NM_001168 | Homo sapiens baculoviral IAP repeat-containing 5 (survivin) (BIRC5), mRNA   |
| NM_001167 | Homo sapiens baculoviral IAP repeat-containing 4 (BIRC4), mRNA  |
| NM_001164 | Homo sapiens amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65) (APBB1), mRNA   |
| NM_001163 | Homo sapiens amyloid beta (A4) precursor protein-binding, family A, member 1 (X11) (APBA1), mRNA  |
| NM_001161 | Homo sapiens nudix (nucleoside diphosphate linked moiety X)-type motif 2 (NUDT2), mRNA  |
| NM_001637 | Homo sapiens acyloxyacyl hydrolase (neutrophil) (AOAH), mRNA  |
| NM_001630 | Homo sapiens annexin A8 (ANXA8), mRNA   |
| NM_003568 | Homo sapiens annexin A9 (ANXA9), mRNA   |
| NM_000700 | Homo sapiens annexin A1 (ANXA1), mRNA   |
| NM_001152 | Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001151 | Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4 (SLC25A4), nuclear gene encoding mitochondrial protein, mRNA |
| NM_001150 | Homo sapiens alanyl (membrane) aminopeptidase (aminopeptidase N, aminopeptidase M, microsomal aminopeptidase, CD13, p150) (ANPEP), mRNA                               |
| NM_001146 | Homo sapiens angiopoietin 1 (ANGPT1), mRNA  |
| NM_000699 | Homo sapiens amylase, alpha 2A; pancreatic (AMY2A), mRNA  |
| NM_000481 | Homo sapiens aminomethyltransferase (glycine cleavage system protein T) (AMT), mRNA   |
| NM_000480 | Homo sapiens adenosine monophosphate deaminase (isoform E) (AMPD3), mRNA  |
| NM_001144 | Homo sapiens autocrine motility factor receptor (AMFR), mRNA  |
| NM_001143 | Homo sapiens amelogenin (Y chromosome) (AMELY), mRNA  |
| NM_001633 | Homo sapiens alpha-1-microglobulin/bikunin precursor (AMBP), mRNA   |
| NM_000698 | Homo sapiens arachidonate 5-lipoxygenase (ALOX5), mRNA  |
| NM_001140 | Homo sapiens arachidonate 15-lipoxygenase (ALOX15), mRNA  |
| NM_001139 | Homo sapiens arachidonate 12-lipoxygenase, 12R type (ALOX12B), mRNA   |
| NM_000697 | Homo sapiens arachidonate 12-lipoxygenase (ALOX12), mRNA  |
| NM_001628 | Homo sapiens aldo-keto reductase family 1, member B1 (aldose reductase) (AKR1B1), mRNA  |
| NM_000696 | Homo sapiens aldehyde dehydrogenase 9 (gamma-aminobutyraldehyde dehydrogenase, E3 isozyme) (ALDH9), mRNA  |
| NM_000692 | Homo sapiens aldehyde dehydrogenase 5 (ALDH5), mRNA   |
| NM_003748 | Homo sapiens aldehyde dehydrogenase 4 (glutamate gamma-semialdehyde dehydrogenase; pyrroline-5-carboxylate dehydrogenase) (ALDH4), mRNA                               |
| NM_000690 | Homo sapiens aldehyde dehydrogenase 2, mitochondrial (ALDH2), mRNA  |
| NM_000689 | Homo sapiens aldehyde dehydrogenase 1, soluble (ALDH1), mRNA  |
| NM_001627 | Homo sapiens activated leucocyte cell adhesion molecule (ALCAM), mRNA   |
| NM_000688 | Homo sapiens aminolevulinate, delta-, synthase 1 (ALAS1), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_003689 | Homo sapiens aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase) (AKR7A2), mRNA  |
| NM_003886 | Homo sapiens A kinase (PRKA) anchor protein 4 (AKAP4), mRNA   |

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| NM_003488 | Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA   |
| NM_001622 | Homo sapiens alpha-2-HS-glycoprotein (AHSG), mRNA   |
| NM_003659 | Homo sapiens alkylglycerone phosphate synthase (AGPS), mRNA   |
| NM_001133 | Homo sapiens afamin (AFM), mRNA   |
| NM_001131 | Homo sapiens acidic epididymal glycoprotein-like 1 (AEGL1), mRNA  |
| NM_003938 | Homo sapiens adaptor-related protein complex 3, delta 1 subunit (AP3D1), mRNA   |
| NM_001127 | Homo sapiens adaptor-related protein complex 1, beta 1 subunit (APIB1), mRNA  |
| NM_000676 | Homo sapiens adenosine A2b receptor (ADORA2B), mRNA   |
| NM_000674 | Homo sapiens adenosine A1 receptor (ADORA1), mRNA   |
| NM_001124 | Homo sapiens adrenomedullin (ADM), mRNA   |
| NM_001120 | Homo sapiens tetracycline transporter-like protein (TETRA), mRNA  |
| NM_001118 | Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) receptor type I (ADCYAP1R1), mRNA                                     |
| NM_000666 | Homo sapiens aminoacylase 1 (ACY1), mRNA  |
| NM_001613 | Homo sapiens actin, alpha 2, smooth muscle, aorta (ACTA2), mRNA   |
| NM_001097 | Homo sapiens acrosin (ACR), mRNA  |
| NM_003501 | Homo sapiens acyl-Coenzyme A oxidase 3, pristanoyl (ACOX3), mRNA  |
| NM_003500 | Homo sapiens acyl-Coenzyme A oxidase 2, branched chain (ACOX2), mRNA  |
| NM_001098 | Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_001096 | Homo sapiens ATP citrate lyase (ACLY), mRNA   |
| NM_001609 | Homo sapiens acyl-Coenzyme A dehydrogenase, short/branched chain (ACADSB), nuclear gene encoding mitochondrial protein, mRNA              |
| NM_001608 | Homo sapiens acyl-Coenzyme A dehydrogenase, long chain (ACADL), mRNA  |
| NM_001093 | Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA   |
| NM_001089 | Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA  |
| NM_000663 | Homo sapiens 4-aminobutyrate aminotransferase (ABAT), nuclear gene encoding mitochondrial protein, mRNA                                   |
| NM_001605 | Homo sapiens alanyl-tRNA synthetase (AARS), mRNA  |
| NM_021123 | Homo sapiens G antigen 7 (GAGE7), mRNA  |
| NM_006994 | Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA  |
| NM_001812 | Homo sapiens centromere protein C 1 (CENPC1), mRNA  |
| NM_015983 | Homo sapiens ubiquitin-conjugating enzyme HBUCE1 (LOC51619), mRNA   |
| NM_009590 | Homo sapiens amine oxidase, copper containing 2 (retina-specific) (AOC2), transcript variant 2, mRNA                                      |
| NM_001159 | Homo sapiens aldehyde oxidase 1 (AOX1), mRNA  |
| NM_007326 | Homo sapiens diaphorase (NADH) (cytochrome b-5 reductase) (DIA1), nuclear gene encoding mitochondrial protein, transcript variant S, mRNA |
| NM_005158 | Homo sapiens v-abl Abelson murine leukemia viral oncogene homolog 2 (arg, Abelson-related gene) (ABL2), transcript variant a, mRNA        |
| NM_004441 | Homo sapiens EphB1 (EPHB1) mRNA   |
| NM_004089 | Homo sapiens delta sleep inducing peptide, immunoreactor (DSIP), mRNA   |
| NM_004077 | Homo sapiens citrate synthase (CS), nuclear gene encoding mitochondrial protein, mRNA   |
| NM_003890 | Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA  |
| NM_003582 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 3 (DYRK3) mRNA  |
| NM_001396 | Homo sapiens dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1 (DYRK1) mRNA  |

## CLAIMS

What we claim is:

1. A double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene, wherein said siNA molecule comprises one or more chemical modifications and each strand of said double-stranded siNA comprises about 21 nucleotides.  
5
2. The siNA molecule of claim 1, wherein said siNA molecule comprises no ribonucleotides.
3. The siNA molecule of claim 1, wherein said siNA molecule comprises ribonucleotides.  
10
4. The siNA molecule of claim 1, wherein one of the strands of said double-stranded siNA molecule comprises a nucleotide sequence that is complementary to a nucleotide sequence of the endogenous mammalian target gene or a portion thereof, and wherein the second strand of said double-stranded siNA molecule comprises a nucleotide sequence substantially similar to the nucleotide sequence of the endogenous mammalian target gene or a portion thereof.  
15
5. The siNA molecule of claim 4, wherein each strand of the siNA molecule comprises about 19 to about 23 nucleotides, and wherein each strand comprises at least about 19 nucleotides that are complementary to the nucleotides of the other strand.  
20
6. The siNA molecule of claim 1, wherein said siNA molecule comprises an antisense region comprising a nucleotide sequence that is complementary to a nucleotide sequence of the endogenous mammalian target gene or a portion thereof, and wherein said siNA further comprises a sense region, wherein said sense region comprises a nucleotide sequence substantially similar to the nucleotide sequence of said endogenous mammalian target gene or a portion thereof.  
25
7. The siNA molecule of claim 6, wherein said antisense region and said sense region each comprise about 19 to about 23 nucleotides, and wherein said antisense region comprises at least about 19 nucleotides that are complementary to nucleotides of the sense region.  
30

8. The siNA molecule of claim 1, wherein said siNA molecule comprises a sense region and an antisense region and wherein said antisense region comprises a nucleotide sequence that is complementary to a nucleotide sequence of RNA encoded by the endogenous mammalian target gene or a portion thereof and said sense region comprises a nucleotide sequence that is complementary to said antisense region.
- 5
9. The siNA molecule of claim 6, wherein said siNA molecule is assembled from two separate oligonucleotide fragments, wherein one fragment comprises the sense region and the second fragment comprises the antisense region of said siNA molecule.
- 10
10. The siNA molecule of claim claim 6, wherein said sense region is connected to the antisense region via a linker molecule.
11. The siNA molecule of claim 10, wherein said linker molecule is a polynucleotide linker.
- 15
12. The siNA molecule of claim 10, wherein said linker molecule is a non-nucleotide linker.
13. The siNA molecule of claim 6, wherein pyrimidine nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
14. The siNA molecule of claim 6, wherein purine nucleotides in the sense region are 2'-deoxy purine nucleotides.
- 20
15. The siNA molecule of claim 6, wherein the pyrimidine nucleotides present in the sense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides.
16. The siNA molecule of claim 9, wherein the fragment comprising said sense region includes a terminal cap moiety at the 5'-end, the 3'-end, or both of the 5' and 3' ends of the fragment comprising said sense region.
- 25
17. The siNA molecule of claim 16, wherein said terminal cap moiety is an inverted deoxy abasic moiety.
18. The siNA molecule of claim 6, wherein the pyrimidine nucleotides of said antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides.

19. The siNA molecule of claim 6, wherein the the purine nucleotides of said antisense region are 2'-O-methyl purine nucleotides.
20. The siNA molecule of claim 6, wherein the purine nucleotides present in said antisense region comprise 2'-deoxy- purine nucleotides.
- 5 21. The siNA molecule of claim 18, wherein said antisense region comprises a phosphorothioate internucleotide linkage at the 3' end of said antisense region.
22. The siNA molecule of claim 6, wherein said antisense region comprises a glyceryl modification at the 3' end of said antisense region.
23. The siNA molecule of claim 9, wherein each of the two fragments of said siNA  
10 molecule comprise 21 nucleotides.
24. The siNA molecule of claim 23, wherein about 19 nucleotides of each fragment of the siNA molecule are base-paired to the complementary nucleotides of the other fragment of the siNA molecule and wherein at least two 3' terminal nucleotides of each fragment of the siNA molecule are not base-paired to the nucleotides of the  
15 other fragment of the siNA molecule.
25. The siNA molecule of claim 24, wherein each of the two 3' terminal nucleotides of each fragment of the siNA molecule are 2'-deoxy-pyrimidines.
26. The siNA molecule of claim 25, wherein said 2'-deoxy-pyrimidine is 2'-deoxy-thymidine.
- 20 27. The siNA molecule of claim 23, wherein all 21 nucleotides of each fragment of the siNA molecule are base-paired to the complementary nucleotides of the other fragment of the siNA molecule.
28. The siNA molecule of claim 23, wherein about 19 nucleotides of the antisense region are base-paired to the nucleotide sequence of the RNA encoded by the  
25 endogenous mammalian target gene or a portion thereof.
29. The siNA molecule of claim 23, wherein 21 nucleotides of the antisense region are base-paired to the nucleotide sequence of the RNA encoded by the endogenous mammalian target gene or a portion thereof.
30. The siNA molecule of claim 9, wherein the 5'-end of the fragment comprising  
30 said antisense region optionally includes a phosphate group.



31. The siNA molecule of claim 1, wherein said mammalian gene is a human gene.
32. A double-stranded short interfering nucleic acid (siNA) molecule that inhibits the expression of an endogenous mammalian target RNA sequence, wherein each strand of said double-stranded siNA molecule comprises about 21 nucleotides and wherein said siNA molecule comprises no ribonucleotides.
33. The siNA molecule of claim 32, wherein said target RNA sequence is encoded by a human gene.
34. A double-stranded short interfering nucleic acid (siNA) molecule that inhibits the expression of an endogenous mammalian target gene, wherein each strand of said double-stranded siNA molecule comprises about 21 nucleotides and wherein said siNA molecule does not require the presence of a ribonucleotide within the siNA molecule for the inhibition of expression of an endogenous mammalian target gene.
35. The siNA molecule of claim 34, wherein said mammalian target gene is a human gene.
36. The siNA molecule of claim 31 or claim 35, wherein said human gene is vascular endothelial growth factor (VEGF).
37. The siNA molecule of claim 31 or claim 35, wherein said human gene is a receptor for VEGF.
38. The siNA of claim 37, wherein said receptor is VEGFR1.
39. The siNA of claim 37, wherein said receptor is VEGFR2.
40. The siNA of claim 37, wherein said receptor is VEGFR3
41. The siNA molecule of claim 31 or claim 35, wherein said human gene is BCL2.
42. The siNA molecule of claim 31 or claim 35, wherein said human gene is HER2/neu.
43. The siNA molecule of claim 31 or claim 35, wherein said human gene is c-Myc.
44. The siNA molecule of claim 31 or claim 35, wherein said human gene is PCNA.
45. The siNA molecule of claim 31 or claim 35, wherein said human gene is REL-A.

46. The siNA molecule of claim 31 or claim 35, wherein said human gene is PTP1B.
47. The siNA molecule of claim 31 or claim 35, wherein said human gene is BACE.
48. The siNA molecule of claim 31 or claim 35, wherein said human gene is CHK1.
49. The siNA molecule of claim 31 or claim 35, wherein said human gene is PKC-  
5 alpha.
50. The siNA molecule of claim 31 or claim 35, wherein said human gene is EGFR (HER1).
51. A pharmaceutical composition comprising the siNA molecule of claim 1 in an acceptable carrier or diluent.
- 10 52. Medicament comprising the siNA molecule of claim 1.
53. Active ingredient comprising the siNA molecule of claim 1.
54. Use of a double-stranded short interfering nucleic acid (siNA) molecule to down-regulate expression of an endogenous mammalian target gene, wherein said siNA molecule comprises one or more chemical modifications and each strand of said  
15 double-stranded siNA comprises about 21 nucleotides.

### **ABSTRACT OF THE DISCLOSURE**

The present invention concerns methods and reagents useful in modulating gene expression in a variety of applications, including use in therapeutic, diagnostic, target validation, and genomic discovery applications. Specifically, the invention relates to

5 small nucleic acid molecules, such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) molecules capable of mediating RNA interference (RNAi) against target nucleic acid sequences. The small nucleic acid molecules are useful in the treatment of any disease or condition that responds to modulation of gene expression or

10 activity in a cell, tissue, or organism.